



# CanAg S100 EIA

REF

708-10

IVD



Instructions for use. 2022-06

Read highlighted changes

|    |                             |
|----|-----------------------------|
| EN | EXPLANATION OF SYMBOLS      |
| BG | ОБЯСНЕНИЕ НА СИМВОЛИТЕ      |
| CS | VÝZNAM SYMBOLŮ              |
| DA | SYMBOLFORKLARING            |
| DE | ERKLÄRUNG DER SYMBOLE       |
| EL | ΕΠΕΞΗΓΗΣΗ ΤΩΝ ΣΥΜΒΟΛΩΝ      |
| ES | SIGNIFICADO DE LOS SÍMBOLOS |
| ET | SÜMBOLITE SELGITUS          |
| FR | EXPLICATION DES SYMBOLES    |
| HR | OBJAŠNJENJE SIMBOLA         |
| HU | JELMAGYARÁZAT               |
| IT | SPIEGAZIONE DEI SIMBOLI     |
| LT | SIMBOLIŲ PAAIŠKINIMAI       |
| LV | SIMBOLU SKAIDROJUMS         |
| NL | VERKLARING DER SYMBOLEN     |
| NO | SYMBOLFORKLARING            |
| PL | OBJAŚNIENIE SYMBOLI         |
| PT | EXPLICAÇÃO DOS SÍMBOLOS     |
| RO | SEMNIIFICAȚIA SIMBOLURILOR  |
| RU | ОБОЗНАЧЕНИЯ                 |
| SV | SYMBOLFÖRKLARING            |
| SK | VÝZNAM SYMBOLOV             |
| SL | RAZLAGA SIMBOLOV            |
| SR | OBJAŠNJENJE SIMBOLA         |
| TR | SEMBOLLERİN AÇIKLAMALARI    |



Use By/Годно до/Použitelné do/  
Holdbar til/Verwendbar bis/  
Ημερομηνία λήξης/Fecha  
de caducidad/Köblök kuni/  
Utiliser jusque/Rok valjanosti/  
Felhasználható/Utilizzare entro/  
Sunaudoti iki/Izlietot līdz/Houdbaar  
tot/Brukes innen/Użyć przed/  
Prazo de validade/Expiră la/  
Использовать до/Använd före/  
Použite'né do/ Uporabno do/  
Upotrebljivo do/Son Kullanma Tarihi

LOT

Batch code/Номер на партида/  
Číslo šarže/Lotnummer/  
Chargenbezeichnung/Αριθμός  
Παρτίδας/Código de lote/Partii  
kood/Code du lot/Kod serije/  
Sarzszám/Codice del lotto/  
Partijos kodas/Partijas kods/Lot  
nummer/Partikode/Kod partii/  
Código do lote/Număr de lot/  
Номер лота/Lotnummer/Číslo  
šarže/Številka serije/Kod partije/  
Parti Kodu



Date of manufacture/Дата на производство/Datum výroby/  
Produktionsdato/Herstellungsdatum/  
Ημερομηνία παραγωγής/Fecha de fabricación/Valmistamise kuupäev/  
Date de fabrication/Datum proizvodnje/  
Gyártási idő/Data di produzione/  
Pagaminimo data/Ražošanas datums/  
Productiedatum/Fremstillingsdato/  
Data produkcji/Data de fabrico/Data fabricației/Дата производства/  
Tillverkningsdatum/Dátum výroby/Datum izdelave/Datum proizvodnje/Úretim tarihi



Temperature limitation/  
Температурни граници/  
Теплотни омеzeи/  
Temperaturbegränsning/  
Temperaturbegrenzung/  
Περιορισμοί θερμοκρασίας/  
Limites de temperatura/  
Temperatuuri piirang/  
Limite de température/  
Temperaturno ograničenje/  
Hőmérsékletre vonatkozó korlátozás/  
Limiti di temperatura/  
Temperatūriniai apribojimai/  
Temperatūras ierobežojums/  
Temperatuurbepijking/  
Temperaturbegrensniger/  
Temperatury graniczne/  
Limite de temperatura/  
Limite de temperatură/  
Температурный режим/  
Temperaturbegränsning/  
Teplotné obmedzenie/  
Omejitve temperature/  
Temperaturno ograničenje/  
Sıcaklık sınırlaması/

## IVD

In Vitro Diagnostic Medical Device/  
Медицински уред за диагностика  
ин vitro/Diagnostický zdravotnícký  
prostředek in vitro/Medicinsk udstyr til  
in vitro-diagnostik/In-vitro-Diagnostikum/  
Ιατροτεχνολογικό προϊόν για διάγνωση  
In Vitro/Dispositivo médico para  
diagnóstico in vitro/In vitro diagnostiline  
meditsiiniseade/Dispositif médical de  
diagnostic in vitro/Diagnostički medicinski  
uređaj In Vitro/In vitro orvosdiagnostikai  
eszköz/Dispositivo medico per test  
diagnostici in vitro/In Vitro Diagnostinė  
Medicinos Priemonė/Medicínska ierice  
in vitro diagnostikai/In vitro-diagnostisch  
medisch instrument/In vitro diagnostisk  
medisinsk utstyr/Wyróób medyczny do  
diagnostyki in vitro/Dispositivo Médico  
de Diagnóstico In Vitro/Dispozitiv medical  
pentru diagnostic in vitro/Только для  
диагностики In Vitro/Endast för in  
vitro-diagnostik/ Zdravotnícka pomôcka na  
diagnostiku in vitro/In vitro diagnostični  
pripomoček/Diagnostički medicinski  
uređaj In Vitro/<96> testleri için yeterlilik  
içerir



Contains sufficient for <96> tests/Съдържа  
достатъчно количество за тестове  
<96>/Lze použít pro <96> testů/Inneholder  
tilstrækkeligt/Inhalt ausreichend für <96>  
Prüfungen/Περιεχόμενο επαρκές για  
«96» εξετάσεις/Contenido suficiente para  
<96> ensayos/Kogusest piisab <96> testi  
läbiviimiseks/Contenu suffisant pour «96»  
tests/Sadržaj dovoljno za <96> testova/A  
doboz tartalma <96> vizsgálat elvégzéséhez  
elegendő/Contenuto sufficiente per «96»  
saggi/Turiny's skirtas atlikti <96> tyrimus/  
Satur's pietiekams <96> testiem/Inhoud  
voldoende voor «96» testen/til «96» test/  
Tilstrækkelig innhold for <96> prøver/  
Wystarczy na wykonanie <96> testów/  
Conteúdo suficiente para «96» ensaios/  
Conținut suficient pentru 96 de teste/  
Содержит достаточные количества для  
«96» определений/Innehåller tillräckligt  
till «96» antal tester/Obshaj postačuje na  
tento počet testov: <96>/Vsebinsa zadostuje  
za <96> testov/Sadržina dovoljna za <96>  
testova/<96> testleri için yeterlilik içerir

## REF

Catalogue number/Каталожен номер/  
Katalogové číslo/Katalognummer/  
Bestellnummer/Αριθμός καταλόγου/  
Número de catálogo/Katalogi number/  
Numéro de catalogue/Katalogski broj/  
Katalógusszám/Numero di catalogo/  
Katalogo numeris/Numurs katalogā/  
Catalogusnummer/Katalognummer/  
Numer katalogowy/Número do catálogo/  
Număr de catalog/Номер по каталогу/  
Produktnummer/Katalógové číslo/  
Kataloga številka/Katalogski broj/  
Katalog numarası



Consult Instructions for Use/  
Прочетете инструкцията за  
употреба/Konzultujte s návodem  
k použití/Se brugsanvisning/Siehe  
Gebrauchsanweisung/Συμβουλευτείτε  
της Οδηγίες σχετικά με τη χρήση/  
Consulte las instrucciones de uso/  
Vt kasutusjuhendit/Consulter le mode  
d'emploi/Pročitajte upute za uporabu/  
Olvassa el a használati útastást/  
Consultare le istruzioni per l'uso/Dél  
naudojimo žiūrėkite instrukcijas/Izlasiet  
lietošanas instrukciju/Raadpleeg de  
instructies voor gebruik/Les instruksene  
for bruk/Sprawdzić w instrukcji użycia/  
Consulte as Instruções de Utilização/  
Consultați instrucțiunile de utilizare/  
Обратитесь к инструкции по  
применению/Se bruksanvisning/  
Prečítajte si návod na používanie/  
Pročitajte uputstvo za upotrebu/  
Kullanım Talimatlarını Bakınız

## CONT

Contents of kit/Съдържание на набора/  
Obsah soupravy/Kittets indhold/Inhalt  
des Kits/Περιεχόμενα του kit/Contenido  
del kit/Komplekt sisaladab/Contenu du  
kit/Sadržaj opreme/A készlet tartalma/  
Contenuto del kit/Rinkinio turinys/  
Komplekta saturs/Inhoud van de set/  
Settets innhold/Zawartość zestawu/  
Conteúdo do kit/Conținutul setului/  
Компоненты набора/Kit innehåll/  
Obsah súpravy/Vseбина kompleta/Sadržaj  
opreme/Kitin içindekiler



Biological risks/Биологическа  
опасност/Biologická rizika/Biologisk  
fare/Biologische Gefahren/Biologiki  
kivdunoi/Riesgos biológicos/  
Biolooligised ohud/Risques biologiques/  
Biolóskli rizici/Biológiai kockázatok/Rischi  
biologici/Biologinis pavojus/Biológiskais  
risks/Biologische risico's/Biologiske  
risikoer/Zagroženie biologické/Riscos  
biológicos/ Biologisk risk/Pericole  
biologice/Biologическая опасность/  
Biologicky rizikové/Biologické riziká/  
Biolóskli rizici/Biyojojisk riskler

## ORIG HUM

Human/C човешки произход/Lidské/  
Human/Human/δείγματα αναφοράς/  
Humano/Inimăritolu/Humaine/Ljudskog  
porjekla/Humán/Origine Umana/  
Žmogaus kilmės/Cilvēku izcelsmes/  
Human/Menneske/Ludzka/Humano/  
Origine umână/Человеческого  
происхождения/Human/L'udské/  
Humanega izvora/Ljudskog porekla/İnsan

## ORIG MOU

From mouse/C миши произход/Myši/  
Fra mus/Maus/από ποντίκι/de ratón/  
Hiirtelt/De souris/Mišjeg porjekla/  
Egérből/Murino/Pelės kilmės/No peles/  
Van muizen/Fra mus/Mysia/Do rato/De  
la șoareci/Мышиного происхождения/  
Från mus/Myšie/Mišjega izvora/Mišjeg  
porekla/Fareden

## ORIG BOV

Bovine/C говежди произход/  
Hovězí/Bovin/Rind/από βοοειδή/  
Bovino/Veistelt/Bovine/Rogate stoke/  
Szarvasmarha/Bovino/Jaučio/No  
liellopa/Bovien/Bovin/Wolowy/Bovino/  
Origine bovină/крупного рогатого  
скота/Från ko/Hováðzie/Rogvejega  
izvora/Rogate krupne stoke/Bovin



Reconstitute with/Пазтваряне с/  
Rozfedte pomoci/Rekonstituieres med/  
Rekonstituieren mit/Ανασύσταση με/  
Reconstituir con/Lahjendamine/  
Reconstituer avec/Rekonstituiraite s/  
Feloldáshoz/Ricostituire con/Atkurti,  
ištirpdant su/Atšikaidīt ar/Reconstitutie  
met/Rekonstituieres med/Odtworzyć  
za pomocą/Reconstituir com/A  
se reconstitui cu/Пастворить в/  
Rekonstituera med/Rozriedte pomocou/  
Rekonstituiraite z/s/Ponovno formiranje  
sa/Yeniden oluşturalur



Manufacturer/Производитель/Výrobce/  
Producent/Hersteller/Κατασκευαστής/  
Fabricante/Tootja/Fabricant/Proizvođač/  
Gyártó/Fabbricante/Gamintojas/  
Ražotājs/Fabrikant/Produsent/  
Producent/Fabricante/Producător/  
Производитель/Tilverkare/ Výrobca/  
Izdelovalec/Proizvođač/Üretici

# INSTRUCTIONS FOR USE

EN

## INSTRUCTIONS FOR USE

Please visit our website **[www.fdi.com/ifu](http://www.fdi.com/ifu)** to obtain the Instructions For Use (IFU) in additional languages.

To ensure that you download the correct IFU for your kit lot, please select the revision corresponding to the issue date printed on the front page of the IFU provided with this kit.

Please follow the IFU carefully. Instructions for safe handling are found in the WARNINGS AND PRECAUTIONS section. Material Safety Data Sheets (MSDS) are available on our website **[www.fdi.com](http://www.fdi.com)**. If you do not have access to the internet, please contact your local distributor, or Fujirebio Diagnostics AB for assistance.

CS

## NÁVOD K POUŽITÍ

Návod k použití v dalších jazycích najdete na našich webových stránkách **[www.fdi.com/ifu](http://www.fdi.com/ifu)**.

Abyste se ujistili, že jste si stáhli správný návod k použití pro vaši šarži sady, vyberte revizi odpovídající datu vydání vytištěnému na přední straně návodu k použití dodanému s touto sadou.

Návod k použití přesně dodržujte. Pokyny pro bezpečnou manipulaci najdete v části VAROVÁNÍ A UPOZORNĚNÍ. Tabulky údajů o bezpečnosti materiálu (MSDS) najdete na stránkách **[www.fdi.com](http://www.fdi.com)**. Nemáte-li přístup k Internetu, požádejte o pomoc místního distributora nebo společnost Fujirebio Diagnostics AB.

DA

## BRUGSANVISNINGER

Gå ind på vores hjemmeside **[www.fdi.com/ifu](http://www.fdi.com/ifu)** for at hente brugsanvisninger på andre sprog.

For at sikre at du henter den rette brugsanvisning til det pågældende kitlot, skal du vælge det revisionsnummer, der svarer til den udgivelsesdato, der er trykt på forsiden af den brugsanvisning, der følger med kittet.

Følg brugsanvisningen omhyggeligt. Vejledning i sikker håndtering findes i afsnittet ADVARSLER OG FORSIGTIGHEDSREGLER. Sikkerhedsdataark (MSDS) kan hentes på vores hjemmeside **[www.fdi.com/ifu](http://www.fdi.com/ifu)**. Hvis du ikke har adgang til internettet, kan du kontakte den lokale distributør eller Fujirebio Diagnostics AB for assistance.

## GEBRAUCHSANWEISUNG

Auf unserer Website **www.fdi.com/ifu** finden Sie die Gebrauchsanweisung in weiteren Sprachen.

Um sicherzustellen, dass Sie die richtige Gebrauchsanweisung für Ihre Kit-Charge herunterladen, wählen Sie bitte die Version, die mit dem Veröffentlichungsdatum auf der Titelseite der mit diesem Kit mitgelieferten Gebrauchsanweisung übereinstimmt.

Halten Sie sich bitte genau an die Gebrauchsanweisung. Anweisungen für den sicheren Umgang finden Sie im Abschnitt „SICHERHEITSHINWEISE UND VORSICHTSMASSNAHMEN“. Die Material Sicherheitsdatenblätter (MSDS) finden Sie auf unserer Website **www.fdi.com**. Sollten Sie keinen Zugang zum Internet haben, so wenden Sie sich bitte an Ihren örtlichen Vertriebshändler oder an Fujirebio Diagnostics AB.

## ΟΔΗΓΙΕΣ ΧΡΗΣΗΣ

Για να λάβετε τις Οδηγίες χρήσης και σε άλλες γλώσσες, επισκεφθείτε την τοποθεσία μας στο web **www.fdi.com/ifu**.

Για να διασφαλίσετε ότι κάνετε λήψη των σωστών Οδηγιών χρήσης για την παρτίδα του kit σας, επιλέξτε την αναθεώρηση που αντιστοιχεί στην ημερομηνία έκδοσης που αναγράφεται στην μπροστινή σελίδα των Οδηγιών χρήσης αυτού του kit.

Ακολουθήστε τις Οδηγίες χρήσης με προσοχή. Μπορείτε να βρείτε οδηγίες για ασφαλή χειρισμό στην ενότητα ΠΡΟΕΙΔΟΠΟΙΗΣΕΙΣ ΚΑΙ ΠΡΟΦΥΛΑΞΕΙΣ. Στην τοποθεσία μας στο web **www.fdi.com** διατίθενται Φύλλα δεδομένων ασφαλείας υλικών (MSDS). Εάν δεν έχετε πρόσβαση στο internet, επικοινωνήστε με το διανομέα της περιοχής σας ή με την Fujirebio Diagnostics AB για βοήθεια.

## INSTRUCCIONES DE USO

Visite nuestro sitio web **www.fdi.com/ifu** para obtener instrucciones de uso (IFU) en otros idiomas.

Para asegurarse de que descarga las instrucciones de uso adecuadas a su lote de kits, seleccione el número de revisión que corresponda a la fecha de emisión impresa en la primera página de las instrucciones de uso suministradas con este kit.

Por favor, siga las instrucciones atentamente. Las instrucciones relativas a la seguridad en la manipulación figuran en el apartado ADVERTENCIAS Y PRECAUCIONES. Las fichas de seguridad de los materiales (MSDS) también están disponibles en nuestro sitio web: **www.fdi.com**. Si no tiene acceso a Internet, póngase en contacto con su distribuidor local o con Fujirebio Diagnostics AB para obtener ayuda.

ET

## KASUTUSJUHEND

Erinevates keeltes kasutusjuhend on kättesaadav meie veebilehel **www.fdi.com/ifu**.

Komplekti partiile vastava kasutusjuhendi allalaadimise tagamiseks valige versioon, mis vastab komplektile lisatud kasutusjuhendi esilehel toodud väljaandmise kuupäevale.

Palun järgige kasutusjuhendit hoolikalt. Ohutusjuhised on toodud HOIATUSTE JA ETTEVAATUSABINÕUDE osas. Materjali ohutuskaardid on kättesaadavad meie veebilehel **www.fdi.com**. Kui Teil ei ole võimalik Internetti kasutada, pöörduge abi saamiseks kohaliku esindaja või Fujirebio Diagnostics AB poole.

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FR

## MODE D'EMPLOI

Visitez notre site Web, **www.fdi.com/ifu**, pour obtenir le mode d'emploi dans d'autres langues.

Pour être sûr que vous téléchargez le mode d'emploi correspondant à votre lot de kit, sélectionnez la version correspondant à la date de publication imprimée sur la première page du mode d'emploi joint à ce kit.

Veuillez suivre soigneusement les indications du mode d'emploi. Les instructions de manipulation sans risque se trouvent dans la section AVERTISSEMENTS ET PRÉCAUTIONS. Des fiches de données de sécurité (MSDS) sont disponibles sur notre site Web, **www.fdi.com**. Si vous n'avez pas accès à Internet, veuillez contacter votre distributeur local ou Fujirebio Diagnostics AB pour obtenir de l'aide.

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HR

## UPUTA ZA UPORABU

Molimo posjetite naše stranice **www.fdi.com/ifu** radi preuzimanja Upute za uporabu (IFU) na ostalim jezicima.

Da biste osigurali preuzimanje ispravnih IFU za vaš komplet, molimo odaberite reviziju koja odgovara datumu izdavanja otisnutim na prednjoj stranici IFU koje ste dobili s kompletom.

Molimo slijedite IFU pažljivo. Uputstva za sigurno rukovanje nalaze se u odjeljku UPOZORENJA I MJERE OPREZA. Sigurnosno-tehnički listovi (MSDS) su dostupni na našim stranicama **www.fdi.com**. Ako nemate pristup inernetu, molimo da se obratite lokalnom distributeru ili Fujirebio Diagnostics AB za pomoć.

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HU

## HASZNÁLATI UTASÍTÁS

További nyelveken készült Használati utasítások találhat a **www.fdi.com/ifu** honlapon.

Annak biztosítása érdekében, hogy az Ön kit tételének megfelelő Használati utasítást töltsse le, válassza a kithoz mellékelt Használati utasítás első oldalán lévő kibocsátási dátumnak megfelelő módosítást.

Kérjük, tartsa be a Használati utasítás előírásait. A biztonságos kezelésre vonatkozó utasítások a FIGYELMEZTETÉSEK ÉS ÓVINTÉZKEDÉSEK című fejezetben található. A Biztonsági adatlapok (MSDS) honlapunkon (**www.fdi.com**) elérhetőek. Amennyiben Ön nem rendelkezik internet hozzáféréssel, forduljon segítségért helyi értékesítőjéhez vagy a Fujirebio Diagnostics AB-hez.

IT

## ISTRUZIONI PER L'USO

Istruzioni per l'uso in altre lingue sono disponibili sul nostro sito web **www.fdi.com/ifu**.

Per scaricare le Istruzioni per l'uso corrispondenti al lotto del proprio kit, selezionare la revisione corrispondente alla data di emissione stampata sulla prima pagina delle Istruzioni per l'uso fornite insieme al kit.

Seguire attentamente le Istruzioni per l'uso. Le istruzioni per una gestione sicura sono contenute nella sezione AVVERTENZE E PRECAUZIONI. Sul nostro sito web **www.fdi.com** sono disponibili le schede tecniche relative alla sicurezza dei materiali. Qualora fosse impossibile accedere a Internet, contattare il proprio distributore locale oppure rivolgersi a Fujirebio Diagnostics AB.

LT

## NAUDOJIMO INSTRUKCIJOS

Kad gautumėte naudojimo instrukcijas kitomis kalbomis, apsilankykite mūsų tinklalapyje: **www.fdi.com/ifu**.

Kad atsisiųstumėte instrukcijas, kurios tikrai tinka Jūsų komplektui, pasirinkite peržiūros datą, kuri atitinka pagaminimo datą, atspausdintą su šiuo komplektu pateiktų instrukcijų viršelyje.

Atidžiai laikykitės instrukcijų. Saugaus naudojimo instrukcijos yra skyriuje PERSPĖJIMAI IR ATSARGUMO PRIEMONĖS. Medžiagų saugos duomenų lapus (MSDS) rasite mūsų tinklalapyje **www.fdi.com**. Jeigu neprieinate prie interneto, kreipkitės pagalvos į savo vietinį distributorių arba į „Fujirebio Diagnostics AB“.

LV

## LIETOŠANAS INSTRUKCIJA

Lai iegūtu lietošanas instrukciju (LI) citās valodās, lūdzu, apmeklājiēt mūsu vietni **www.fdi.com/ifu**.

Lai lejupielādētu pareizo LI savam komplektam, lūdzu, izvēlieties versiju, kas atbilst šim komplektam pievienotās LI pirmajā lappusē iespiestajam izdošanas datumam.

Lūdzu, rūpīgi iepazīstieties ar LI un ievērojiet to. Norādījumi drošai lietošanai sniegti sadaļā BRĪDINĀJUMI UN PIESARDZĪBAS PASĀKUMI. Materiālu drošības datu lapas (MDDL) ir pieejamas mūsu vietnē **www.fdi.com**. Ja jums nav pieejams internets, lūdzu, sazinieties ar vietējo izplatītāju vai Fujirebio Diagnostics AB, lai iegūtu palīdzību.

**NL**

## **INSTRUCTIES VOOR GEBRUIK**

Ga naar onze website **www.fdi.com/ifu** voor de Instructies voor gebruik in andere talen.

Om ervoor te zorgen dat u de juiste Instructie voor gebruik downloadt voor uw setpartij, selecteert u de revisie die overeenkomt met de uitgavedatum die afgedrukt staat op de voorpagina van de Instructies voor gebruik die bij deze kit bijgeleverd zijn.

Volg de Instructie voor gebruik zorgvuldig op. U vindt de instructies voor een veilig hanteren in het gedeelte **WAARSCHUWINGEN EN VOORZORGSMAATREGELEN**. Op onze website **www.fdi.com** zijn ook Veiligheidsinformatiebladen (MSDS) beschikbaar. Als u geen toegang hebt tot het internet, neemt u dan contact op met uw plaatselijke distributeur of met Fujirebio Diagnostics AB voor assistentie.

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**NO**

## **BRUKSINSTRUKSER**

Bruksinstrukser (IFU) på andre språk kan lastes ned fra vår hjemmeside **www.fdi.com/ifu**.

For å sikre at du laster ned den riktige IFU-en for ditt settparti, vennligst velg oppdateringen som svarer til utstedelsesdatoen på forsiden av IFU-en levert med settet ditt.

Vennligst følg IFU-instruksene nøye. Instruks for sikker håndtering fins i avsnittet **ADVARSLER OG FORHOLDSREGLER**. Materialesikkerhetsdatabaser (MSDS) kan lastes ned fra vår hjemmeside **www.fdi.com**. Dersom du ikke har adgang til internettet, vennligst kontakt din lokalforhandler eller Fujirebio Diagnostics AB for å få hjelp.

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**PL**

## **INSTRUKCJA UŻYCIA**

Instrukcje użycia (IFU) w innych językach znaleźć można na naszej stronie internetowej **www.fdi.com/ifu**.

Aby mieć pewność, że pobierasz instrukcję użycia właściwą dla partii zestawu, wybierz wersję odpowiadającą dacie wydania nadrukowanej na okładce IFU dostarczonej z zestawem.

Należy ściśle przestrzegać zaleceń zawartych w instrukcji użycia. Instrukcje dotyczące bezpiecznej pracy znaleźć można w części **OSTRZEŻENIA I ŚRODKI OSTROŻNOŚCI**. Karty charakterystyki substancji (MSDS) dostępne są na naszej stronie internetowej **www.fdi.com**. W przypadku braku dostępu do Internetu, pomoc można uzyskać u lokalnego dystrybutora lub w firmie Fujirebio Diagnostics AB.

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## INSTRUÇÕES DE UTILIZAÇÃO

Visite o nosso sítio da Internet **www.fdi.com/ifu** para obter Instruções de Utilização (IDU) em idiomas adicionais.

Para assegurar que descarrega as IDU correctas para o lote do seu kit, seleccione a revisão correspondente à data de emissão impressa na capa das IDU fornecida com este kit.

Siga as IDU cuidadosamente. É possível encontrar instruções para um manuseamento seguro na secção ADVERTÊNCIAS E PRECAUÇÕES. As Fichas de Dados de Segurança do Material (FDSM) estão disponíveis em **www.fdi.com**. Se não tiver acesso à Internet, contacte o seu distribuidor local ou a Fujirebio Diagnostics AB para obter ajuda.

## INSTRUCȚIUNI DE UTILIZARE

Vizitați site-ul nostru Web **www.fdi.com/ifu** pentru a obține instrucțiunile de utilizare (IFU) în alte limbi.

Pentru a vă asigura că descărcați instrucțiunile de utilizare corecte pentru lotul acestui kit, selectați revizia corespunzătoare cu data emiterii, imprimată pe prima pagină a instrucțiunilor de utilizare furnizate cu acest kit.

Urmați cu atenție instrucțiunile de utilizare. Instrucțiunile pentru o manevrare în siguranță se regăsesc în secțiunea AVERTISMENTE ȘI PRECAUȚII. Fișele de date despre siguranța materialelor (Material Safety Data Sheets - MSDS) sunt disponibile pe site-ul nostru Web **www.fdi.com**. Dacă nu aveți acces la Internet, contactați pentru asistență distribuitorul dvs. local sau Fujirebio Diagnostics AB.

## NÁVOD NA POUŽITIE

Návod na použitie v ďalších jazykoch nájdete na našej webovej lokalite **www.fdi.com/ifu**.

Aby ste sa uistili, že ste prevzali správny návod na použitie pre danú šaržu súpravy, vyberte revíziu zodpovedajúcu dátumu vydania vytlačenému na prednej strane návodu na použitie dodanému s touto súpravou.

Návod na použitie presne dodržujte. Pokyny na bezpečnú manipuláciu nájdete v časti VÝSTRAHY A UPOZORNENIA. Tabuľky údajov o bezpečnosti materiálu (MSDS) nájdete na stránkach **www.fdi.com**. Ak nemáte prístup na internet, požiadajte o pomoc miestneho distribútora alebo spoločnosť Fujirebio Diagnostics AB.

## NAVODILA ZA UPORABO

Če si želite ogledati navodila za uporabo v drugih jezikih, obiščite spletno mesto **www.fdi.com/ifu**.

Če želite zagotoviti, da ste prenesli ustrezna navodila za uporabo za vašo serijo kompleta, izberite različico, ki ustreza datumu izdaje, natisnjenemu na sprednji strani navodil za uporabo, priloženih temu kompletu.

Prosimo vas, da skrbno upoštevate navodila za uporabo. Navodila za varno ravnanje so v poglavju OPOZORILA IN PREVIDNOSTNI UKREPI. Varnostni listi (MSDS) so na naši spletni strani **www.fdi.com**. Če nimate dostopa do interneta, se za pomoč obrnite na svojega lokalnega distributerja ali družbo Fujirebio Diagnostics AB.

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## UPUTSTVO ZA UPOTREBU

Molimo Vas da posetite naš sajt **www.fdi.com/ifu** kako biste dobili Uputstvo za upotrebu na ostalim jezicima.

Da biste bili sigurni da ste skinuli odgovarajuće Uputstvo za upotrebu za Vaš set proizvoda, molimo Vas da odaberete odeljak koji odgovara datumu odštampanom na prednjoj strani Uputstva za upotrebu koje ste dobili uz proizvod.

Molimo Vas da pažljivo sledite uputstva data u Uputstvu za upotrebu. Uputstva za bezbedno korišćenje su data u odeljku pod naslovom UPO-ZORENJE I OPREZ. Informacije vezane za bezbedno korišćenje materijala su dostupne na sajtu **www.fdi.com**. Ako nemate pristup Internetu, molimo Vas da stupite u kontakt sa lokalnim distributerom ili se telefonom obratite Fujirebio Diagnostics službi za davanje informacija.

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## BRUKSANVISNING

Bruksanvisning (IFU) på andra språk finns att ladda ner från vår hemsida, **www.fdi.com/ifu**.

Säkerställ att du laddar ner rätt bruksanvisning för din kit lot genom att välja samma revisionsdatum som anges på framsidan av den bruksanvisning som medföljer denna förpackning.

Vänligen följ noga anvisningarna i bruksanvisningen. Instruktioner för säker användning finns i stycket VARNINGAR OCH FÖRSIKTIGHETSÅTGÄRDER. Säkerhetsdatablad (MSDS) finns att ladda ner från vår hemsida, **www.fdi.com**. Om du inte har tillgång till internet, vänligen kontakta din lokala distributör eller Fujirebio Diagnostics AB för att få hjälp.

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**KULLANIM TALIMATLARI**

İlave dillerde Kullanım Talimatlarını (KT) almak için lütfen **www.fdi.com/ifu** adresindeki web sitemizi ziyaret edin.

Kit partiniz için doğru KT'nı indirdiğinizden emin olmak için lütfen bu kitle birlikte verilen KT'nın ön sayfasında yazılı düzenlenme tarihiyle eşleşen gözden geçirmeyi seçin.

Lütfen KT'nı dikkatli bir şekilde izleyin. Güvenli kullanımla ilgili talimatlar UYARILAR VE ÖNLEMLER bölümünde bulunmaktadır. Malzeme Güvenliği Veri Sayfaları (MGVS) **www.fdi.com** adresindeki web sitemizde bulunmaktadır. İnternet erişiminiz bulunmuyorsa, destek için lütfen yerel distribütörünüz veya Fujirebio Diagnostics AB ile temasa geçin.

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# CanAg S100 EIA

**Instructions for use**

**Enzyme immunometric assay kit  
For 96 determinations**

## **INTENDED USE**

The CanAg S100 EIA kit is intended for the quantitative determination of S100B (S100A1B + S100BB) in serum.

## **SUMMARY AND EXPLANATION OF THE ASSAY**

S100 is a 20 kDa protein belonging to the S100/calmodulin/troponin C superfamily of EF-hand calcium-binding proteins. S100 was originally isolated from human brain and considered a glial-cell specific protein (1). Today, 20 monomers of the S100 family have been identified based on structural and functional similarities (2, 3). Most of the S100 proteins exist as dimers and are expressed in a cell-specific manner. Two of the S100 monomers, designated S100A1 and S100B (4) are highly conserved between species and are found as homo- (BB) and heterodimers (A1B) in central nervous system glial cells and in certain peripheral cells eg. Schwann cells, melanocytes, adipocytes, and chondrocytes (5). S100A1B and S100BB are also present in malignant tissues, most notably in melanoma and to a lesser extent in glioma, thyroid cell carcinoma and renal cell carcinoma (2).

Determination of S100B in serum has been shown to be clinically useful for prognosis and treatment monitoring of patients diagnosed with malignant melanoma (6-8). Studies also suggest that S100B may be useful in the management of patients with brain damage from eg. traumatic head injury, perinatal asphyxia, cardiac arrest, cardiac surgery and stroke (9-15).

## **PRINCIPLE OF THE TEST**

The CanAg S100 EIA is a solid-phase, two-step, non-competitive immunoassay based on two mouse monoclonal antibodies specific for two different epitopes expressed in S100B. The assay determines both S100A1B and S100BB without cross-reactivity with other forms of S100. Calibrators and patient samples are incubated together with biotinylated Anti-S100B monoclonal antibody (MAb) S23 in Streptavidin coated microstrips. S100B present in calibrators or samples is adsorbed to the Streptavidin coated microwells by the biotinylated Anti-S100B MAb during the incubation. The strips are then washed and incubated with horseradish peroxidase (HRP) labelled Anti-S100B MAb S53. After washing, buffered Substrate/ Chromogen reagent (hydrogen peroxide and 3, 3', 5, 5' tetra-methylbenzidine) is added to each well and the enzyme reaction is allowed to proceed. During the enzyme reaction a blue

colour will develop if antigen is present. The intensity of the colour is proportional to the amount of S100B present in the samples.

The colour intensity is determined in a microplate spectrophotometer at 620 nm (or optionally at 405 nm after addition of Stop Solution). Calibration curves are constructed for each assay by plotting absorbance value versus the concentration for each calibrator. The S100B concentrations of patient samples are then read from the calibration curve.

## REAGENTS

- Each CanAg S100 EIA kit contains reagents for 96 tests.
- The expiry date of the kit is stated on the label on the outside of the kit box.
- Do not use the kit beyond the expiry date.
- Do not mix reagents from different kit lots.
- Store the kit at 2–8°C. Do not freeze.
- Opened reagents are stable according to the table below provided they are not contaminated, stored in resealed original containers and handled as prescribed. Return to 2–8°C immediately after use.

| Component | Quantity | Storage and stability after first opening |
|-----------|----------|-------------------------------------------|
|-----------|----------|-------------------------------------------|

### MICROPLA

|                   |         |                                             |
|-------------------|---------|---------------------------------------------|
| <b>Microplate</b> | 1 Plate | 2–8°C until expiry date stated on the plate |
|-------------------|---------|---------------------------------------------|

12 x 8 wells coated with Streptavidin. After opening, immediately return unused strips to the aluminium pouch, containing desiccant. Reseal carefully to keep dry.

|                         |                      |                                                |
|-------------------------|----------------------|------------------------------------------------|
| <b>S100 Calibrators</b> | 6 vials, lyophilized | 4 weeks at 2–8°C<br>3 months at –30°C or below |
|-------------------------|----------------------|------------------------------------------------|

|            |             |          |          |
|------------|-------------|----------|----------|
| <b>CAL</b> | <b>S100</b> | <b>A</b> | 1 x 1 mL |
| <b>CAL</b> | <b>S100</b> | <b>B</b> | 1 x 1 mL |
| <b>CAL</b> | <b>S100</b> | <b>C</b> | 1 x 1 mL |
| <b>CAL</b> | <b>S100</b> | <b>D</b> | 1 x 1 mL |

| Component |      |   | Quantity | Storage and stability after first opening |
|-----------|------|---|----------|-------------------------------------------|
| CAL       | S100 | E | 1 x 1 mL |                                           |
| CAL       | S100 | F | 1 x 1 mL |                                           |

The lyophilised calibrators contain bovine S100B in a protein matrix with 0.02% NaN<sub>3</sub> as preservative. To be reconstituted with water before use. **NOTE:** The exact S100B concentration is lot specific and is indicated on the label of each vial.

|                         |           |           |                                            |  |
|-------------------------|-----------|-----------|--------------------------------------------|--|
| BIOTIN                  | Anti-S100 |           |                                            |  |
| <b>Biotin Anti-S100</b> |           | 1 x 15 mL | 2–8°C until expiry date stated on the vial |  |

Biotin Anti-S100 monoclonal antibody from mouse, approximately 2 µg/mL. Contains phosphate buffered saline (pH 7.2) with CaCl<sub>2</sub>, bovine serum albumin, bovine immunoglobulin, blocking agents, Tween 20, an inert blue dye and 0.01% methyl-isothiazolone (MIT) as preservative. Ready for use.

|                              |           |             |                                            |  |
|------------------------------|-----------|-------------|--------------------------------------------|--|
| CONJ                         | Anti-S100 |             |                                            |  |
| <b>Tracer, HRP Anti-S100</b> |           | 1 x 0.75 mL | 2–8°C until expiry date stated on the vial |  |

Stock solution of HRP Anti-S100 monoclonal antibody from mouse, approximately 20 µg/mL. Contains preservatives. To be diluted with Tracer Diluent before use.

|                       |      |           |                                            |  |
|-----------------------|------|-----------|--------------------------------------------|--|
| DIL                   | CONJ |           |                                            |  |
| <b>Tracer Diluent</b> |      | 1 x 15 mL | 2–8°C until expiry date stated on the vial |  |

Phosphate buffered saline (pH 7.2) with bovine serum albumin, blocking agents, detergents, an inert blue dye, and 0.01 % methyl-isothiazolone (MIT) as preservative. Ready for use.

| Component | Quantity | Storage and stability after first opening |
|-----------|----------|-------------------------------------------|
|-----------|----------|-------------------------------------------|

|             |            |
|-------------|------------|
| <b>SUBS</b> | <b>TMB</b> |
|-------------|------------|

|                          |           |                                               |
|--------------------------|-----------|-----------------------------------------------|
| <b>TMB HRP-Substrate</b> | 1 x 12 mL | 2–8°C until expiry<br>date stated on the vial |
|--------------------------|-----------|-----------------------------------------------|

Contains buffered hydrogen peroxide and 3, 3', 5, 5' tetramethyl-benzidine (TMB). Ready for use.

|             |
|-------------|
| <b>STOP</b> |
|-------------|

|                      |           |                                               |
|----------------------|-----------|-----------------------------------------------|
| <b>STOP Solution</b> | 1 x 15 mL | 2–8°C until expiry<br>date stated on the vial |
|----------------------|-----------|-----------------------------------------------|

Contains 0.12 M hydrochloric acid. Ready for use.

|                |            |
|----------------|------------|
| <b>WASHBUF</b> | <b>25X</b> |
|----------------|------------|

|                         |           |                                                 |
|-------------------------|-----------|-------------------------------------------------|
| <b>Wash Concentrate</b> | 1 x 50 mL | 2–8°C until expiry<br>date stated on the bottle |
|-------------------------|-----------|-------------------------------------------------|

A Tris-HCl buffered salt solution with Tween 20. Contains Germall II as preservative. To be diluted with water 25 times before use.

### Indications of instability

The TMB HRP-Substrate should be colourless or slightly bluish. A blue colour indicates that the reagent has been contaminated and should be discarded.

### WARNINGS AND PRECAUTIONS

#### For in vitro diagnostic use.

- For professional use only.
- Please refer to the US Department of Health and Human Services (Bethesda, Md., US) publication No. (CDC) 88-8395 on laboratory safety or any other local or national regulation.
- Handle all patient specimens as potentially infectious.
- Reagents contain sodium azide ( $\text{NaN}_3$ ) as a preservative. Sodium azide may react with lead and copper plumbing to form highly explosive metal azides. On disposal, flush with a large volume of water to prevent azide build-up.
- Follow local guidelines for disposal of all waste material.

# Protocol Sheet

## CanAg S100 EIA REF 708-10

Mix the components directly before use. Use shaking conditions according to the Instructions.

| Step                            | Vial/Plate                 |                     | Procedure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |               |                            |                     |   |    |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |    |     |    |    |     |    |
|---------------------------------|----------------------------|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------------------------|---------------------|---|----|---|---|-----|---|---|-----|---|---|-----|---|---|-----|---|---|-----|---|---|-----|---|---|-----|---|---|-----|---|----|-----|----|----|-----|----|
| 1. Prepare S100 Calibrators     | CAL                        | S100                | Add 1 mL of distilled water to each vial and mix gently. Allow to stand for at least 15 minutes.<br>NOTE: The exact concentration of each calibrator is stated on the label. Reconstituted stability: 4 weeks at 2-8°C.                                                                                                                                                                                                                                                                                                                                                                                           |               |                            |                     |   |    |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |    |     |    |    |     |    |
|                                 | A, B, C, D, E, F           |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |               |                            |                     |   |    |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |    |     |    |    |     |    |
|                                 |                            |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |               |                            |                     |   |    |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |    |     |    |    |     |    |
| Prepare Wash Solution           | WASHBUF 25X                |                     | Dilute 50 mL of Wash Concentrate with 1200 mL of distilled or deionized water.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |               |                            |                     |   |    |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |    |     |    |    |     |    |
| Prepare Tracer working solution | CONJ                       | Anti-S100           | Mix 50 µL of Tracer, HRP Anti-S100 with 1 mL of Tracer Diluent per strip:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |               |                            |                     |   |    |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |    |     |    |    |     |    |
|                                 | DIL                        | CONJ                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |               |                            |                     |   |    |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |    |     |    |    |     |    |
|                                 |                            |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |               |                            |                     |   |    |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |    |     |    |    |     |    |
|                                 |                            |                     | <table><thead><tr><th>No. of Strips</th><th>Tracer, HRP Anti-S100 (µL)</th><th>Tracer Diluent (mL)</th></tr></thead><tbody><tr><td>1</td><td>50</td><td>1</td></tr><tr><td>2</td><td>100</td><td>2</td></tr><tr><td>3</td><td>150</td><td>3</td></tr><tr><td>4</td><td>200</td><td>4</td></tr><tr><td>5</td><td>250</td><td>5</td></tr><tr><td>6</td><td>300</td><td>6</td></tr><tr><td>7</td><td>350</td><td>7</td></tr><tr><td>8</td><td>400</td><td>8</td></tr><tr><td>9</td><td>450</td><td>9</td></tr><tr><td>10</td><td>500</td><td>10</td></tr><tr><td>11</td><td>550</td><td>11</td></tr></tbody></table> | No. of Strips | Tracer, HRP Anti-S100 (µL) | Tracer Diluent (mL) | 1 | 50 | 1 | 2 | 100 | 2 | 3 | 150 | 3 | 4 | 200 | 4 | 5 | 250 | 5 | 6 | 300 | 6 | 7 | 350 | 7 | 8 | 400 | 8 | 9 | 450 | 9 | 10 | 500 | 10 | 11 | 550 | 11 |
| No. of Strips                   | Tracer, HRP Anti-S100 (µL) | Tracer Diluent (mL) |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |               |                            |                     |   |    |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |    |     |    |    |     |    |
| 1                               | 50                         | 1                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |               |                            |                     |   |    |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |    |     |    |    |     |    |
| 2                               | 100                        | 2                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |               |                            |                     |   |    |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |    |     |    |    |     |    |
| 3                               | 150                        | 3                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |               |                            |                     |   |    |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |    |     |    |    |     |    |
| 4                               | 200                        | 4                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |               |                            |                     |   |    |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |    |     |    |    |     |    |
| 5                               | 250                        | 5                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |               |                            |                     |   |    |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |    |     |    |    |     |    |
| 6                               | 300                        | 6                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |               |                            |                     |   |    |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |    |     |    |    |     |    |
| 7                               | 350                        | 7                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |               |                            |                     |   |    |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |    |     |    |    |     |    |
| 8                               | 400                        | 8                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |               |                            |                     |   |    |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |    |     |    |    |     |    |
| 9                               | 450                        | 9                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |               |                            |                     |   |    |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |    |     |    |    |     |    |
| 10                              | 500                        | 10                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |               |                            |                     |   |    |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |    |     |    |    |     |    |
| 11                              | 550                        | 11                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |               |                            |                     |   |    |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |   |     |   |    |     |    |    |     |    |

|        |                             | 12                           | 600                                                                              | 12 |
|--------|-----------------------------|------------------------------|----------------------------------------------------------------------------------|----|
| 2.     | Wash                        | MICROPLA                     | Wash each well once with Wash Solution.<br>Use manual or automatic washer.       |    |
| 3.     | Add calibrators and samples | CAL S100<br>A, B, C, D, E, F | 50 $\mu$ L in each well                                                          |    |
| 4.     | Add Biotin Anti-S100        | BIOTIN Anti-S100             | 100 $\mu$ L in each well                                                         |    |
| 5.     | Incubate                    | MICROPLA                     | 2 hour shaking at room temperature                                               |    |
| 6.     | Wash                        | MICROPLA                     | Wash each well three times with Wash Solution<br>Use manual or automatic washer. |    |
| 7.     | Add Tracer working solution | TRACER WORKING<br>SOLUTION   | 100 $\mu$ L in each well                                                         |    |
| 8.     | Incubate                    | MICROPLA                     | 1 hour shaking at room temperature                                               |    |
| 9.     | Wash                        | MICROPLA                     | Wash each well six times with Wash Solution.<br>Use manual or automatic washer.  |    |
| 10.    | Add TMB HRP-Substrate       | SUBS TMB                     | 100 $\mu$ L in each well                                                         |    |
| 11.    | Incubate                    | MICROPLA                     | 30 min shaking at room temperature                                               |    |
| 12.    | Read absorbance             | MICROPLA                     | 620 nm                                                                           |    |
| Alt.12 | Add Stop Solution           | STOP                         | 100 $\mu$ L in each well                                                         |    |
| Alt.13 | Incubate                    | MICROPLA                     | 1 min shaking at room temperature                                                |    |
| Alt.14 | Read absorbance             | MICROPLA                     | Read at 405 nm within 5 min.                                                     |    |

## **CLP (1272/2008) HAZARD CLASSIFICATION**

Information about CLP (1272/2008) HAZARD CLASSIFICATION can be found at the end of this document.

## **SPECIMEN COLLECTION AND HANDLING**

The CanAg S100 EIA is intended for use with serum. Collect blood by venipuncture and separate the serum according to common procedures. Samples can be stored at 2–8° C for 24 hours. For longer periods it is recommended to store the samples at –20° C or below. Avoid repeated freezing and thawing of the samples. Allow frozen samples to thaw slowly, preferably at 2–8° C over night and then bring the samples to room temperature before analysis.

## **PROCEDURE**

### **Materials required but not supplied with the kit**

#### **1. Microplate shaker**

Shaking should be medium to vigorous. Longitudinal shaking approximately 200 strokes/min, oscillations 700-1100/min.

#### **2. Microplate wash device**

Automatic plate wash capable of performing 1 and 6 washing cycles with a minimal fill volume of 350 µL/well/washcycle.

An 8-channel pipette with disposable plastic tips for delivery of 350 µL is recommended if an automatic microplate washer is not used.

#### **3. Microplate spectrophotometer**

With a wavelength of 620 nm and/or 405 nm and an absorbance range of 0 to 3.0.

#### **4. Precision pipettes**

With disposable plastic tips to deliver microlitre and millilitre volumes. An 8-channel pipette or dispenser pipette with disposable plastic tips for delivery of 100 µL is useful but not essential.

#### **5. Distilled or deionized water**

For reconstitution of S100 Calibrators and for preparation of Wash Solution.

## Procedural notes

1. A thorough understanding of this package insert is necessary to ensure proper use of the CanAg S100 EIA kit. The reagents supplied with the kit are intended for use as an integral unit. Do not mix identical reagents from kits having different lot numbers. Do not use the kit reagents after the expiry date printed on the outside of the kit box.
2. Reagents should be allowed to reach room temperature (20–25°C) prior to use. The assay should only be performed at temperatures between 20–25°C to obtain accurate results. Frozen specimens should be brought to room temperature slowly and must be gently but thoroughly mixed after thawing.
3. Before starting to pipette calibrators and patient specimens it is advisable to mark the strips to be able to clearly identify the samples during and after the assay.
4. The requirement for efficient and thorough washing for separation of bound and unbound antigen and reagents from the solid-phase bound antibody-antigen complexes is one of the most important steps in an EIA. In order to ensure efficient washing make sure that all wells are completely filled to the top edge with wash solution during each wash cycle, that wash solution is dispensed at a good flow rate, that the aspiration of the wells between and after the wash cycles is complete and that the wells are empty. If there is liquid left, invert the plate and tap it carefully against absorbent paper.
  - Automatic strip washer: Follow the manufacturer's instructions for cleaning and maintenance diligently and wash the required number of wash cycles prior to and after each incubation step. It's highly recommended to use *strip* process mode and *overflow* wash mode with a dispensing volume of 800 µL. The aspiration/wash device should not be left standing with the Wash Solution for long periods, as the needles may get clogged resulting in poor liquid delivery and aspiration.
5. The TMB HRP-Substrate is very sensitive for contamination. For optimal stability of the TMB HRP-Substrate, pour the required amount from the vial to a carefully cleaned reservoir or preferably a disposable plastic tray to avoid contamination of the reagent. Be sure to use clean disposable plastic pipette tips (or respenser pipette tip).
6. Be sure to use clean disposable plastic pipette tips and a proper pipetting technique when handling samples and reagents. Avoid carry-over by holding the pipette tip slightly above the top of the well and avoid touching the plastic strip or surface of the liquid. A proper pipetting technique is of particular importance when handling the TMB HRP-Substrate Solution.

| Preparation of reagents | Stability of prepared reagent                   |
|-------------------------|-------------------------------------------------|
| <b>S100 Calibrators</b> | 4 weeks at 2–8°C<br>3 months at –30° C or below |

Add exactly 1.0 mL of distilled water to each vial and mix gently. Allow to stand for at least 15 minutes to reconstitute. **NOTE:** The concentration of the calibrators is stated on the labels and should be used for calculation of results.

|                      |                                         |
|----------------------|-----------------------------------------|
| <b>Wash Solution</b> | 2 weeks at 2–25°C in a sealed container |
|----------------------|-----------------------------------------|

Pour the 50 mL Wash Concentrate into a clean container and dilute 25- fold by adding 1200 mL of distilled or deionized water to give a buffered Wash Solution.

|                                |                                           |
|--------------------------------|-------------------------------------------|
| <b>Tracer working solution</b> | 3 weeks at 2–8°C<br>in a sealed container |
|--------------------------------|-------------------------------------------|

Prepare the required quantity of Tracer working solution by mixing 50 µL of Tracer, HRP Anti-S100 with 1 mL of Tracer Diluent per strip (see table below):

| No. of Strips | Tracer, HRP Anti-S100 (µL) | Tracer Diluent (mL) |
|---------------|----------------------------|---------------------|
| 1             | 50                         | 1                   |
| 2             | 100                        | 2                   |
| 3             | 150                        | 3                   |
| 4             | 200                        | 4                   |
| 5             | 250                        | 5                   |
| 6             | 300                        | 6                   |
| 7             | 350                        | 7                   |
| 8             | 400                        | 8                   |
| 9             | 450                        | 9                   |
| 10            | 500                        | 10                  |
| 11            | 550                        | 11                  |
| 12            | 600                        | 12                  |

Be sure to use a clean plastic or glass bottle for preparation of the Tracer working solution.

**Alternative:** Pour the content of the Tracer, HRP Anti-S100 into the vial of Tracer Diluent and mix gently. Make sure that all of the Tracer, HRP Anti-S100 is transferred to the vial of Tracer Diluent.

**NOTE:** The Tracer working solution is stable for 3 weeks at 2–8°C. Do not prepare Tracer working solution than will be used within this period and make sure that it is stored properly.

### Assay procedure

Perform each determination in duplicate for calibrators and patient samples. A calibration curve should be run with each assay. All reagents and samples must be brought to room temperature (20–25°C) before use.

1. Start to prepare S100 Calibrators, Wash Solution and Tracer working solution. It is important to use clean containers. Follow the instructions carefully.
2. Transfer the required number of microplate strips to a strip frame. (Immediately return the remaining strips to the aluminium pouch containing a desiccant and reseal carefully). Wash each strip once with the Wash Solution. Do not wash more strips than can be handled within 30 min.
3. Pipette 50 µL of the S100 Calibrators (CAL A, B, C, D, E, F) and patient samples (unknowns-Unk) into the strip wells according to the following scheme:

|   | 1        | 2        | 3    | 4 | 5 | 6 | 7 etc |
|---|----------|----------|------|---|---|---|-------|
| A | Cal<br>A | Cal<br>E | etc. |   |   |   |       |
| B | Cal<br>A | Cal<br>E |      |   |   |   |       |
| C | Cal<br>B | Cal<br>F |      |   |   |   |       |
| D | Cal<br>B | Cal<br>F |      |   |   |   |       |
| E | Cal<br>C | Unk1     |      |   |   |   |       |
| F | Cal<br>C | Unk1     |      |   |   |   |       |
| G | Cal<br>D | Unk2     |      |   |   |   |       |
| H | Cal<br>D | Unk2     |      |   |   |   |       |

4. Add 100 µL of Biotin Anti-S100 to each well using a 100 µL precision pipette (or an 8-channel 100 µL precision pipette). Avoid carry-over by holding the pipette tip slightly above the top of the well and avoid touching the plastic strip or the surface of the liquid.

5. Incubate the frame containing the strips for 2 hours ( $\pm 10$  min) at room temperature (20–25°C) with constant shaking of the plate using a microplate shaker.
6. After the first incubation aspirate and wash each strip 3 times using the wash procedure described in Procedural notes, item 4.
7. Add 100  $\mu$ L of Tracer working solution to each well. Use the same pipetting procedure as in item 4 above.
8. Incubate the frame for 1 hour ( $\pm 5$  min) at room temperature with constant shaking.
9. After the second incubation aspirate and wash each strip 6 times, using the wash procedure described in Procedural notes, item 4.
10. Add 100  $\mu$ L of TMB HRP-Substrate to each well using the same pipetting procedure as in item 4. The TMB HRP-Substrate should be added to the wells as quickly as possible and the time between the addition to the first and last well should not exceed 5 min.
11. Incubate for 30 min ( $\pm 5$  min) at room temperature with constant shaking. Avoid direct sunlight.
12. Immediately read the absorbance at 620 nm in a microplate spectrophotometer.

### Option

If the laboratory does not have access to a microplate spectrophotometer capable of reading at 620 nm, the absorbance can be determined as follows:

**Alt. 12.** Add 100  $\mu$ L of Stop Solution. Mix and read absorbance at 405 nm in a microplate spectrophotometer within 5 min after addition of Stop Solution.

### Measurement range

The CanAg S100 EIA measures concentrations between 10 and 3500 ng/L. If S100B concentrations above the measuring range are to be expected, it is recommended to dilute samples with normal human serum prior to analysis. **NOTE:** The serum used for dilution should also be measured in order to determine the endogenous S100B concentration (see “Calculation of results”).

### Quality control

CanChek Tumor Marker Control Sera Levels 1 and 2 (available separately, REF 107-20) are recommended for validation of the assay series. If values outside of the specified range are obtained, a complete check of reagents and reader performance should be made and the analysis repeated.

## Reference material

Since no common reference material is available for S100A1B or S100BB, CanAg S100 Calibrator values are assigned against a set of in-house reference standards.

## CALCULATION OF RESULTS

If a microplate spectrophotometer reader with built-in data calculation program is used, refer to the manual for the plate reader and create a program using the concentration stated on the labels of each of the S100 Calibrators.

For automatic calculation of S100 results it is recommended to use either of the following methods:

- Cubic spline curve fit method. Calibrator 0 should be included in the curve with the value 0 ng/L.
- Spline smoothed curve fit method. Calibrator 0 should be used as plate blank.
- Interpolation with point-to-point evaluation. Calibrator 0 should be included in the curve with the value 0 ng/L.
- Quadratic curve fit method. Calibrator 0 should be included in the curve with the value 0 ng/L.

**Note:** 4-parametric or linear regression should not be used.

For manual evaluation, a calibration curve is constructed by plotting the absorbance (A) values obtained for each S100 calibrator against the corresponding S100 concentration (in ng/L), see figure below. The unknown S100 concentrations can then be read from the calibration curve using the mean absorbance value of each patient specimen.

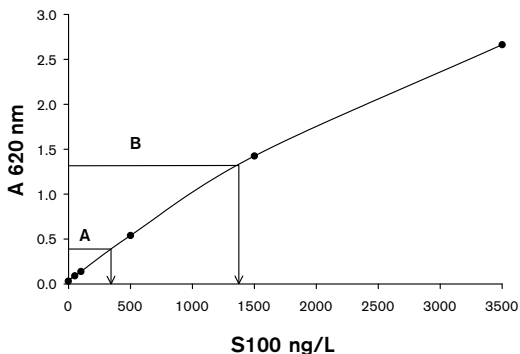
If samples in an initial analysis give S100 levels higher than Calibrator F (circa 3500 ng /L) the samples should be diluted 1/10 with normal human serum and reanalysed to obtain the accurate S100 concentration. **NOTE:** The sample used for dilution should also be measured in order to determine the endogenous S100 concentration.

The S100 concentration of the undiluted sample is calculated as:

$$\text{Dilution 1/10: } 10 \times ([\text{S100}]_{\text{Diluted sample}}^{-(0.9 \times [\text{S100}]_{\text{Normal serum}})})$$

## Example of results

| Specimen   |      |   | Calibrator values | Mean abs value (A) | S100 (ng/L) |
|------------|------|---|-------------------|--------------------|-------------|
| CAL        | S100 | A | 0 ng/L            | 0.041              |             |
| CAL        | S100 | B | 50 ng/L           | 0.091              |             |
| CAL        | S100 | C | 100 ng/L          | 0.139              |             |
| CAL        | S100 | D | 500 ng/L          | 0.540              |             |
| CAL        | S100 | E | 1500 ng/L         | 1.425              |             |
| CAL        | S100 | F | 3500 ng/L         | 2.663              |             |
| Specimen A |      |   |                   | 0.352              | 305         |
| Specimen B |      |   |                   | 1.377              | 1435        |



Example (do not use this curve or table above to determine actual assay results).

## LIMITATIONS OF THE PROCEDURE

The level of S100 cannot be used as absolute evidence for the presence or absence of malignant disease, and the S100 test should not be used in cancer screening. The results of the test should be interpreted only in conjunction with other investigations and procedures in the diagnosis of disease and the management of patients, and the S100 test should not replace any established clinical examination.

Increases in serum S100B should be interpreted with caution for patients subject to trauma, such as bone fractures, burns, internal soft-tissue damage and surgery since these conditions are connected to significant release of S100B (15).

Anti-reagent antibodies (human anti-mouse antibody (HAMA) or heterophilic antibodies) in the patient sample may occasionally interfere with the assay, even though specific blocking agents are included in the buffer.

Biotin may interfere with the assay giving false low results. This should be taken into consideration for patients taking dietary supplements or receiving therapy containing high (> 5mg/day) or extremely high (300 mg/day) biotin doses. Peak serum levels have been reported to occur 1-3h post ingestion and a physiological half-life of 8-16h depending on renal function (18,19). In a study by Grimsey et al. (18) a specimen concentration of 30 ng/mL was reached 8h following intake of 10 mg of biotin. For patients on very high doses of biotin it is recommended to stop taking biotin for at least 2 days before blood draw (20).

## EXPECTED VALUES

S100B was measured in 269 healthy blood donors. The lower and upper extremes of the normal range were examined using IFCC recommended non-parametric statistical treatment. The reference interval contains the central 95% fraction of the reference distribution. The upper reference limit was accordingly estimated as the 97.5% upper fractile.

|                               | Mean (ng/L) | SD (ng/L) | Upper reference limit |
|-------------------------------|-------------|-----------|-----------------------|
| Healthy blood donors<br>n=269 | 54          | 15.6      | 90 ng/L               |

It is recommended that each laboratory establish their own normal range to account for such local environmental factors as diet, climate, living conditions, patient selection, etc.

## PERFORMANCE CHARACTERISTICS

### Precision

Total precision was calculated according to NCCLS guideline EP5-A (16) using four levels of frozen pooled human serum containing added S100 and 22 different

CanAg S100 EIA reagent combinations. Each sample was randomly pipetted (n=2/analysis) and analysed twice each day over 20 days.

| Sample | Replicates | Mean<br>(ng/L) | Within-run<br>SD (ng/L) | Within-run<br>CV % | Between-day<br>SD (ng/L) | Between-day<br>CV % |
|--------|------------|----------------|-------------------------|--------------------|--------------------------|---------------------|
| S100 1 | 80         | 70             | 2                       | 2.5                | 2                        | 2.2                 |
| S100 2 | 80         | 302            | 5                       | 1.6                | 8                        | 2.5                 |
| S100 3 | 80         | 1440           | 20                      | 1.4                | 21                       | 1.5                 |
| S100 4 | 80         | 2260           | 30                      | 1.3                | 85                       | 2.0                 |

### Detection limit

The detection limit of the CanAg S100 EIA is  $\leq 10$  ng/L defined as the concentration corresponding to the mean of the absorbance values of the S100 calibrator A plus 2 standard deviations according to formula:

$$\frac{2 \times \text{SD CAL A}}{\text{OD CAL B} - \text{OD CAL A}} \times [\text{CAL B}] \text{ ng/L}$$

### Recovery

Spiked serum samples were prepared by adding human S100 antigen to normal serum samples. The recovery of the added antigen was in the range 97–105 %.

**NOTE:** recovery studies should **not** be performed using the kit calibrators.

### Hook effect

No hook effect has been noticed with samples up to 150 000 ng/L. **NOTE:** In very high samples the colour of the substrate will change from blue to greenish (and eventually yellow in extremely high samples). This will lead to a falsely low absorbance at 620 nm, and in extreme cases the absorbance may fall within the calibration curve range and noticed as a hook.

### Linearity

Patient samples were serially diluted with normal human serum and analysed. The obtained values were within  $\pm 10\%$  of the expected values.

## Specificity

The CanAg S100 EIA is based on two mouse monoclonal antibodies specific for two different epitopes expressed in S100B, the catching MAb S23 and the detecting MAb S53. Thus the assay determines both S100A1B and S100BB without cross-reactivity with other forms of S100. The NCCLS guideline EP7-P (17) was followed to determine possible sources of interference. The following substances and concentrations were tested and found not to interfere with the test.

|                         | Concentration with no significant<br>( $\pm$ 10%) interference |
|-------------------------|----------------------------------------------------------------|
| Lipemia (Intralipid®)   | 10 mg/mL                                                       |
| Bilirubin, unconjugated | 0.6 mg/mL                                                      |
| Hemoglobin              | 3.9 mg/mL                                                      |

## Biotin interference

A study was conducted to evaluate biotin interference. Low and high serum control samples were spiked to final biotin concentrations of 6, 15, 30, and 60 ng/mL. The mean S100 concentration was determined for each sample and the percent recovery for each biotin concentration was calculated using the formula: Recovery (%) = 100x (Mean S100 concentration w. biotin added/Mean S100 concentration w. diluent only added).

| S100 analyte level | Biotin test conc. (ng/mL) | Expected S100 conc. (ng/L) | Observed S100 conc. (ng/L) | Recovery (%) |
|--------------------|---------------------------|----------------------------|----------------------------|--------------|
| Low                | 6                         | 136                        | 133                        | 97           |
| High               | 6                         | 608                        | 599                        | 98           |
| Low                | 15                        | 138                        | 129                        | 94           |
| High               | 15                        | 620                        | 582                        | 94           |
| Low                | 30                        | 133                        | 113                        | 84           |
| High               | 30                        | 632                        | 540                        | 85           |
| Low                | 60                        | 134                        | 87,0                       | 65           |
| High               | 60                        | 659                        | 416                        | 63           |

Based on linear regression analysis, the lowest concentration of biotin found to influence test results ( $\geq 10\%$ ) was 20 ng/mL.

## Method comparison

The CanAg S100 EIA was compared to the Sangtec 100. Ninety-eight human serum samples from patients with malignant melanoma, ranging in values from 0-8000 ng/L were measured and linear regression analyses of the results yielded:

$$\text{CanAg S100} = 0.4 \times \text{Sangtec 100} + 0.03 \quad r = 0.99$$

## CLP (1272/2008) HAZARD CLASSIFICATION

The following warnings and precautions apply to

|      |     |
|------|-----|
| SUBS | TMB |
|------|-----|

### Hazard pictograms:

**Signal word:**

Danger

**Hazard Statement:**

Repr. 1B: H360D May damage the unborn child.

**Prevention statement:**

P202 Do not handle until all safety precautions have been read and understood.

**Prevention:**

P280 Wear protective gloves / protective clothing / eye protection / face protection.

**Precautionary statement response:**

P308+P313 IF exposed or concerned get medical advice/attention.

**Precautionary statement disposal:**

P501 Dispose of contents / container to an approved hazardous / special waste disposal facility in accordance with local and national regulations.

**Restricted to professional users.****Hazardous substances: 2- Pyrrolidone****Other hazards**

None of the mixtures in the kit contains any substances considered to meet the criteria classifying them as PBT and/or vPvB.

## WARRANTY

The performance data presented here were obtained using the assay procedure indicated. Any change or modification of the procedure not recommended by Fujirebio Diagnostics may affect the results, in which event Fujirebio Diagnostics disclaims all warranties expressed, implied or statutory including the implied warranty of merchantability and fitness for use.

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