DATA SHEET

Jena Bioscience

Direct Extraction Buffer

Buffer for fast extraction of DNA and RNA from sample material

Cat. No.	Amount
PCR-534-20ML	20 ml
PCR-534-100ML	100 ml

For general laboratory use.

Please centrifuge briefly before opening (volume ≤2 ml).

Shipping: shipped at ambient temperature

Storage Conditions: store at 4°C or -20°C

Shelf Life: 12 months

Form: liquid

Concentration: 5 x

Description:
Direct Extraction Buffer allows an easy and fast extraction of DNA and RNA directly from blood, swabs and animal- or plant tissue. The buffer is optimized for use in combination with Direct PCR or RT-PCR master mixes like qPCR ProbesMaster (PCR-396) or SCRIPT Direct RT-qPCR ProbesMaster (PCR-528).

The mix allows DNA and RNA preparation within 3-5 minutes and with a minimum of pipetting steps. It is especially recommended for:

- Direct detection of viral or bacterial DNA in nasal or throat swabs
- Direct PCR from blood samples
- Direct amplification of target DNA from various tissue samples
- Point-of-Care diagnostics

The preparation process can be easily automatized.

Content:
Direct Extraction Buffer
5 x conc.

Sample preparation
a) Blood Samples / Liquid Samples

- Dilute 5x Extraction Buffer to 1x concentrated Buffer with PCR-grade water.
- Transfer 2 µl of the Blood/Liquid Sample into a tube containing 100 µl to 200 µl of 1x concentrated Extraction Buffer (a dilution of Blood 1:50 to 1:100 in 1x Extraction Buffer is recommended).
- Close the tube and vortex for 15 sec
- Incubate the tube at room temperature (20-25 °C) for 2-3 min.
- Transfer 1-2 µl of the supernatant into a 20 µl qPCR assay or 2-5 µl into a 50 µl qPCR assay.

b) Samples from nasal or throat swabs

- Dilute 5x Extraction Buffer to 1x concentrated Buffer with PCR-grade water.
- Transfer 200 µl 1x Extraction Buffer into a 1.5 ml microtube
- Cut off the cotton tip with the collected nasal or throat swab and place it in the micro tube
- Close the tube and vortex for 15 sec
- Incubate at room temperature (20-25 °C) for 2-3 min
- Remove the cotton tip and squeeze it out at the rim of the tube
- Centrifuge briefly and transfer 1-2 µl of the supernatant into a 20 µl qPCR assay or 2-5 µl into a 50 µl qPCR assay.

c) Samples from Animal or Plant Tissue

- Dilute 5x Extraction Buffer to 1 x concentrated Buffer with PCR-grade water.
- Prepare a small piece from animal or plant tissue not exceeding

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8 mm in diameter
- Crack plant seeds to less than 1 mm in diameter using a Bead-Beater, Tissue Lyser or small hammer
- Place the sample in a 1.5 ml microtube
- Add 1x concentrated Extraction Buffer to the tissue sample as following:

Sample size (diameter)	1-2 mm	3-4 mm	5-8 mm
1x Extraction Buffer	50 µl	100 µl	200 µl

- Mix briefly by tapping or vortexing and make sure that the sample is soaked with Extraction Buffer
- Incubate at room temperature (20-25 °C) for 3 min
- Centrifuge briefly and transfer 1-2 µl of the supernatant into a 20 µl qPCR assay or 2-5 µl into a 50 µl qPCR assay

Hazard pictograms:

Exclamation mark

Signal word: Warning

Hazard statements:
H315 Causes skin irritation.
H319 Causes serious eye irritation.

Precautionary statements:
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/....
P302 + P352 IF ON SKIN: Wash with plenty of water/...
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321 Specific treatment (see ... on this label).
P332 + P313 If skin irritation occurs: Get medical advice/attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.