

Revised: November 16, 2016

# **Product Information**

## **CF™** Dye / Biotin / DNP Tyramide

Unit Size: 0.5 mg

#### **Technical Summary**

| Cat. No. | CF™ Dye     | Abs <sub>max</sub> (nm) | Em <sub>max</sub> (nm) | Extinction coefficient | MW    |
|----------|-------------|-------------------------|------------------------|------------------------|-------|
| 92170    | CF™350      | 347                     | 448                    | 18,000                 | ~614  |
| 92197    | CF™405S     | 404                     | 431                    | 33,000                 | ~689  |
| 92198    | CF™405L     | 395                     | 545                    | 24,000                 | ~1692 |
| 92171    | CF™488A     | 490                     | 515                    | 70,000                 | ~666  |
| 92199    | CF™514      | 516                     | 548                    | 105,000                | ~1337 |
| 92172    | CF™543      | 541                     | 560                    | 100,000                | ~1006 |
| 96020    | Cyanine 555 | 555                     | 565                    | 150,000                | ~851  |
| 96021    | CF™555      | 555                     | 565                    | 150,000                | ~3076 |
| 92173    | CF™568      | 562                     | 583                    | 100,000                | ~833  |
| 92174    | CF™594      | 593                     | 614                    | 115,000                | ~848  |
| 92194    | CF™620R     | 617                     | 639                    | 115,000                | ~857  |
| 92175    | CF™640R     | 642                     | 662                    | 105,000                | ~951  |
| 96022    | CF™647      | 650                     | 665                    | 240,000                | ~928  |
| 92195    | CF™660R     | 663                     | 682                    | 100,000                | ~1007 |
| 92196    | CF™680R     | 680                     | 701                    | 140,000                | ~1031 |
| 92176    | Biotin-XX   |                         |                        |                        | ~590  |
| 96018    | Fluorescein | 492*                    | 514*                   | 90,000                 | ~495  |
| 96019    | DNP         |                         |                        |                        | ~416  |

<sup>\*</sup> Abs / ems in pH=9 buffer

#### Storage and Handling

Store CF<sup>TM</sup> dye / biotin / DNP tyramide at  $-20^{\circ}$ C, protected from light. Product is stable for at least 12 months from date of receipt if stored as recommended. Stock solution may be prepared in DMSO or dH<sub>2</sub>O and can be stored at  $\leq$  -20°C for at least 12 months.

### **Product Description**

CF™ dye / biotin / DNP tyramide conjugate is used for tyramide signal amplification (TSA)¹².³, which is an enzyme mediated detection method that uses horseradish peroxidase (HRP) to generate high-density labeling of a target protein or nucleic acid in situ. A tyramide conjugate is incubated in the presence of HRP (often bound to a secondary antibody), which catalyzes the binding of the tyramide ( and associated label) to adjacent tyrosines for enhanced fluorescent or colorimetric signal.

- 1. Journal of Immunological Methods 125, 279-285 (1989).
- 2. Journal of Immunological Methods 137, 103-112 (1991).
- 3. Cytometry A. (2010), doi:10.1002/cyto.a.20970

#### **Related Products**

| Cat #       | Product Name  | Unit Size               |  |
|-------------|---|-------------------------|--|
| 20400-1mL   | HRP Goat Anti-Mouse IgG (H+L), 1mg/mL                         | 1 mL                    |  |
| 20400-100uL | HRP Goat Anti-Mouse IgG (H+L), 1mg/mL                         | 100 uL                  |  |
| 20400-1mg   | HRP Goat Anti-Mouse IgG (H+L), 1mg                            | 1 mg                    |  |
| 20401-1mL   | HRP Goat Anti-Mouse IgG (H+L), highly cross-adsorbed, 1mg/mL  | 1 mL                    |  |
| 20401-100uL | HRP Goat Anti-Mouse IgG (H+L), highly cross-adsorbed, 1mg/mL  | 100 uL                  |  |
| 20401-1mg   | 01-1mg HRP Goat Anti-Mouse IgG (H+L), highly cross-adsorbed   |                         |  |
| 20402-1mL   | HRP Goat Anti-Rabbit IgG (H+L), 1mg/mL                        | 1 mL                    |  |
| 20402-100uL | HRP Goat Anti-Rabbit IgG (H+L), 1mg/mL                        | 100 uL                  |  |
| 20402-1mg   | HRP Goat Anti-Rabbit IgG (H+L)                                | 1 mg                    |  |
| 20403-1mL   | HRP Goat Anti-Rabbit IgG (H+L), highly cross-adsorbed, 1mg/mL | 1 mL                    |  |
| 20403-100uL | HRP Goat Anti-Rabbit IgG (H+L), highly cross-adsorbed, 1mg/mL | 100 uL                  |  |
| 20403-1mg   | HRP Goat Anti-Rabbit IgG (H+L), highly cross-adsorbed         | 1 mL                    |  |
| 29049       | HRP Streptavidin  | 1 mg                    |  |
| 92300       | Mix-n-Stain HRP Antibody Labeling Kit                         | 1x 10-20 ug<br>labeling |  |
| 92301       | Mix-n-Stain HRP Antibody Labeling Kit                         | 1x 25-50ug<br>labeling  |  |
| 92302       | Mix-n-Stain HRP Antibody Labeling Kit                         | 1x 50-100ug<br>labeling |  |
| 23001       | EverBrite™ Mounting Medium                                    | 10 mL                   |  |
| 23002       | EverBrite™ Mounting Medium with DAPI                          |                         |  |
| 23003       | EverBrite™ Hardset Mounting Medium                            | 10 mL                   |  |
| 23004       | EverBrite™ Hardset Mounting Medium with DAPI                  |                         |  |
| 23005       | CoverGrip™ Coverslip Sealant                                  | 15 mL                   |  |
| 23006       | Flow Cytometry Fixation/Permeabilization Kit                  | 50 tests                |  |

CF dye technology is covered by pending U.S. and international patents. Materials from Biotium are sold for research use only, and are not intended for food, drug, household, or cosmetic use.

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