

## AF 405 CTB

**Article number:** KF-YG0791

**specification:** 100  $\mu$ g

### Product description

Recombinant cholera toxin B subunit (rCTB) lacks cholera toxicity but possesses the ability to bind to ganglioside GM1 on cell membranes, making it a widely used, safe, and effective retrograde neural tracer. In addition, the binding of CTB to GM1 can identify lipid rafts, so CTB is also frequently used as a marker for lipid rafts. The addition of fluorescent dyes allows the labeling and tracing behavior to be observed and identified more conveniently and effectively, making fluorescently labeled CTB conjugates the top choice as lipid raft markers and endocytosis tracers for live-cell imaging or fixed cells.

- Conjugates are available in 24 bright and photostable fluorescent dyes, ranging from green to near-infrared.
- Among them, 7 CF<sup>®</sup> dyes are second-generation dyes specially designed by Biotium, offering advantages of better water solubility, higher stability, and stronger fluorescence brightness compared to other commercially available dyes.



- As fluorescent lipid raft markers and retrograde neuronal tracers, they can be used for real-time imaging of live cells or staining of fixed cells.
- HRP-, FITC-, rhodamine-, and biotin-labeled CTB meet the needs of more application scenarios.

### **Product Nature**

Probe cellular localization: membrane/cell surface

Experimental subject: fixed cells or intact/live cells

Detection type: real-time imaging

Detection method: fluorescence microscopy, flow cytometry

Cell permeability: non-permeable

Fixation options: pre-staining fixation (formaldehyde), post-staining fixation (formaldehyde)

Toxin: Cholera toxin

Color: Blue, green, orange, red, far-red, near-infrared

Form: Lyophilized powder

### **Storage and transportation**

Storage conditions: Store at  $-20^{\circ}$  C protected from light, valid for at least 6 months.

It is recommended to thaw the product for the first time and prepare a storage solution



of appropriate concentration, then aliquot and store as needed to avoid partial protein inactivation caused by repeated freeze-thaw cycles. After reconstitution, the product is valid for 3 months when stored at 4° C, and for 6 months when stored at -20° C.

### Staining example

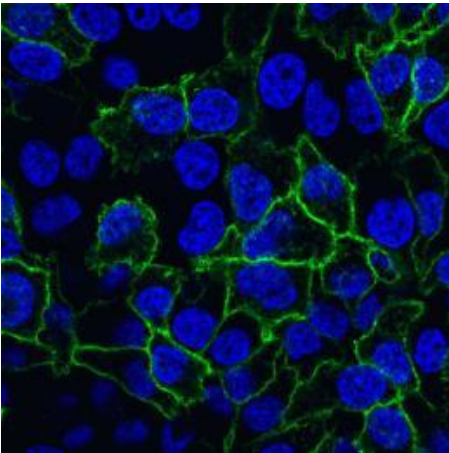


Figure 1. HeLa cells surface-labeled with CF®488A CTB (green) at 4° C, then fixed, permeabilized, and stained with DAPI (blue).



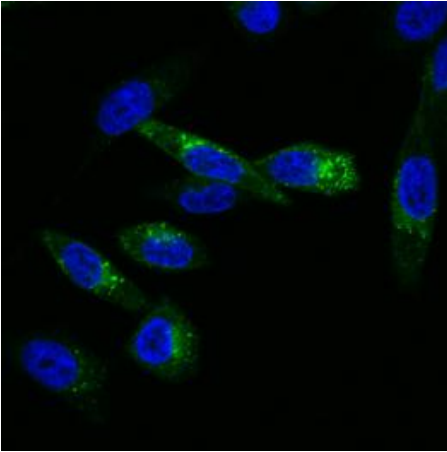


Figure 2. HeLa cells were incubated with CF<sup>®</sup>488A CTB (green) at 37° C for 30 minutes to allow endocytosis, then fixed, permeabilized, and stained with DAPI (blue).

