

Product Information

CF™647 hydrazide

Catalog Number: 92136

Unit Size: 1 mg

Color and Form: Dark blue solid.

Storage and Handling

Store CF™647 hydrazide at $\leq -20^{\circ}\text{C}$. Stock solution may be prepared in PBS or Di-H₂O and can be stored at $\leq -20^{\circ}\text{C}$. The shelf-life of the solution is at least 6 months.

Technical Summary

Abs/Em Maxima: 650/665 nm (See Figure 1)

Extinction coefficient: 240,000

Molecular weight: ~3,000

Flow cytometry laser line: 633, 635 or 640 nm

Microscopy laser line: 633, 635 or 640 nm

Product Application

CF™647 hydrazide is a far-red dye with hydrazide group. The dye can be used as a polar tracer or for labeling biomolecule with an aldehyde or ketone group (such as carbohydrate molecules after peroxidation with periodate).

CF™647 hydrazide is bright, extremely water-soluble and nontoxic. These properties make the dye an excellent fluorescent tracer for visualizing the fine structures of neurons by staining the cytoplasm of the cells (Figure 2). The dye can be introduced into cells by microinjection.

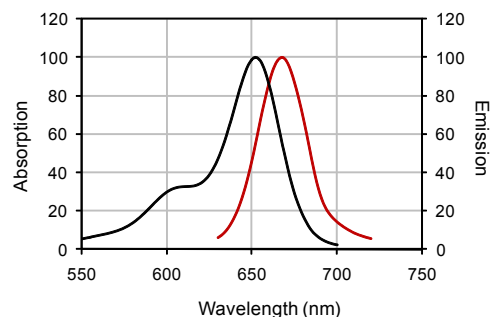


Figure 1. Absorption and emission spectra of CF™647 in PBS.

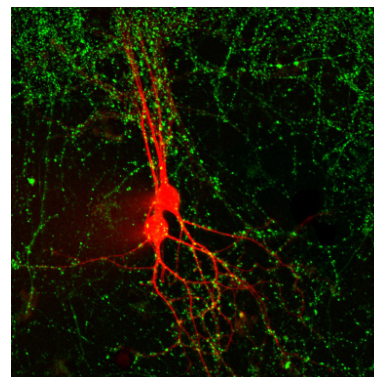


Figure 2. Rat hippocampal neurons stained with SynaptoGreen C4 (also called FM1-43, cat# 70020) and CF647 hydrazide. SynaptoGreen C4 stains synaptic vesicles (green) while CF647 hydrazide (cat# 92136) stains the cell bodies (red). Courtesy of Hang Zhou from professor Guosong Liu's lab in Tsinghua University.

Other Related Products

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- A full selection CF™ dyes and CF™ antibody conjugates
- CF™ dye-labeled α -bungarotoxin conjugates
- FM and AM nerve terminal dyes (e.g., FM1-43, AM1-43 and FM4-64, etc.)
- TTX
- Fluo-3 and other calcium indicators
- Membrane potential dyes