

PerCP-iFluor® 680

Catalog Number: 2657

Unit Size: 1 mg

Product Details

Storage Conditions	Refrigerated (2-8 °C), Minimize light exposure
Expiration Date	6 months upon receiving

Chemical Properties

Appearance	Solid
Molecular Weight	~35000
Soluble In	Water

Spectral Properties

Excitation Wavelength	482 nm
Emission Wavelength	697 nm

Applications

PerCP-iFluor® 680 is a tandem fluorophore composed of PerCP (Peridinin-chlorophyll-protein complex) linked to iFluor® 680. PerCP is a naturally derived protein fluorophore isolated from Dinophyceae species, characterized by a high extinction coefficient, high quantum efficiency, and a large Stokes shift. It is efficiently excited at 488 nm and transfers energy to the iFluor® 680 acceptor, resulting in emission in the far-red region around 680 nm. This spectral shift enables its use in multicolor flow cytometry panels.

The tandem structure extends the emission wavelength beyond native PerCP and supports multiplexing with other fluorophores such as FITC, PE, and additional dyes excited by different lasers. Compared to PerCP alone, the tandem conjugate exhibits improved photostability under typical flow cytometry conditions. PerCP-iFluor® 680 conjugates are commonly used for fluorescent immunolabeling and flow cytometric analysis of cell populations, including applications such as fluorescence-activated cell sorting (FACS).