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Bovine Serum Albumin (BSA), AF 488 conjugate

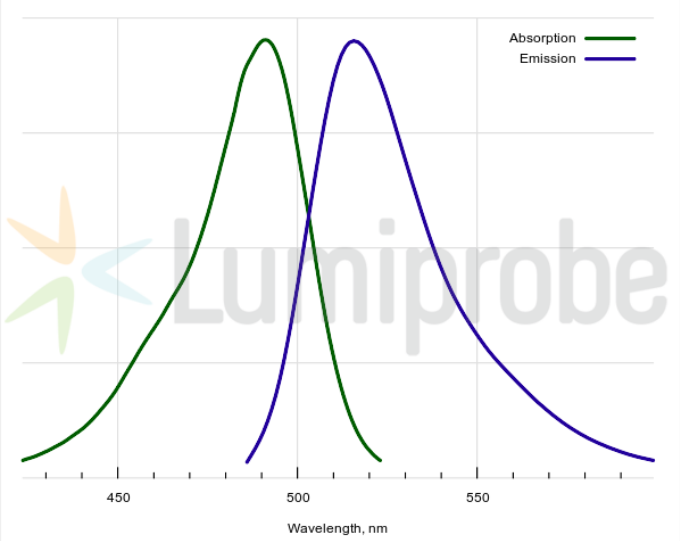
http://www.lumiprobe.com/p/af488-bsa

This product is a ready-to-use fluorescent conjugate of bovine serum albumin (BSA) with the bright and photostable green dye AF 488, employed for a wide range of applications in biology: tracking endocytosis and intracellular transport, studying the integrity, and permeability of cellular barriers, cerebrospinal fluid (CSF) flow and glymphatic system function, as well as validation of drug delivery systems, among others.

Thanks to a precisely defined dye-to-protein ratio (DOL), BSA AF 488 conjugate serves as a reference standard for calibrating fluorescence intensity and quantitative analysis in microscopy and other fluorescence-based methods.

AF 488 features a high quantum yield and significantly outperforms previous-generation dyes (e.g., FITC) in photostability, making it ideal for microscopy, especially during long-term live-cell observations. The fluorescence of AF 488 is stable across a broad pH range (from 4 to 10). Thus, the signal remains unchanged under fluctuations in acidity within cellular compartments (e.g., in endosomes or lysosomes). The dye's spectral characteristics perfectly match the standard green channel (FITC/GFP) of most fluorescence microscopes and flow cytometers.

The conjugate is supplied as a lyophilized powder that can be easily reconstituted in aqueous buffer solutions. The product requires no purification, saving time on sample preparation.



Absorption and emission spectra of AF 488

General properties

Appearance:	orange solid
Solubility:	water
Quality control:	spectrophotometry
Storage conditions:	24 months after receival at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate.
Legal statement:	This Product is offered and sold for research purposes only. It has not been tested for safety and efficacy in food, drug, medical device, cosmetic, commercial or any other use. Supply does not express or imply authorization to use for any other purpose, including, without limitation, in vitro diagnostic purposes, in the manufacture of food or pharmaceutical products, in medical devices or in cosmetic products.

Spectral properties

Excitation/absorption maximum, nm:	495
ε, $L \cdot mol^{-1} \cdot cm^{-1}$:	71800
Emission maximum, nm:	519

Fluorescence quantum yield:	0.91
CF_{260}:	0.16
CF_{280}:	0.10