

## **Lumiprobe Corporation**

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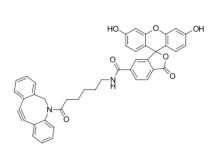
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## FAM DBCO, 6-isomer

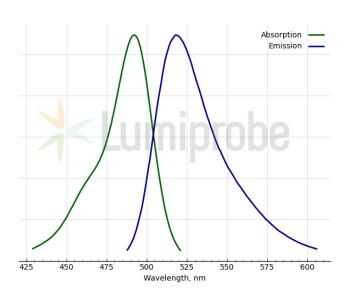
http://www.lumiprobe.com/p/fam-dbco-6

Fluorescein (FAM) is one of the oldest yet well-known fluorescent dyes. This derivative of FAM contains the cyclooctyne group (dibenzocyclooctyne, DBCO or ADIBO). Pure 6-isomer. DBCO reacts quickly and efficiently with azides by simply mixing the components without the need for a copper catalyst (so-called sterically promoted cycloaddition reaction or SPAAC).

FAM DBCO can be used for the labeling of proteins, peptides, nucleic acids, and other molecules containing azide groups. Fluorescein can be detected using a variety of different instruments.



Structure of FAM DBCO, 6-isomer



Absorption and emission spectra of FAM

## **General properties**

Appearance: orange solid Molecular weight: 676.71 Molecular formula:  $C_{42}H_{32}N_2O_7$ 

Solubility: good in DMF, DMSO

Quality control: NMR <sup>1</sup>H, HPLC-MS (95%)

Storage conditions: Storage: 24 months after receival at -20°C in the dark. Transportation: at room

temperature for up to 3 weeks. Avoid prolonged exposure to light. Desiccate.

Legal statement: Product is offered and sold for research purposes only. Product is not tested for safety

and efficacy in food, drug, medical device, cosmetic, no express or implied authorization to use for any other purpose, including, without limitation, in vitro diagnostic purposes, for humans or animals or for commercial purposes.

## **Spectral properties**

Excitation/absorption maximum, nm: 492  $\epsilon$ , L·mol<sup>-1</sup>·cm<sup>-1</sup>: 74000 Emission maximum, nm: 517 Fluorescence quantum yield: 0.93