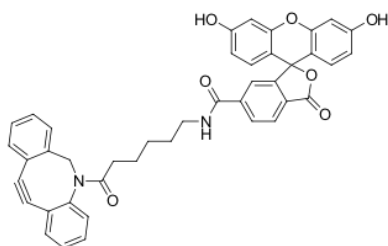


FAM DBCO, 6-isomer

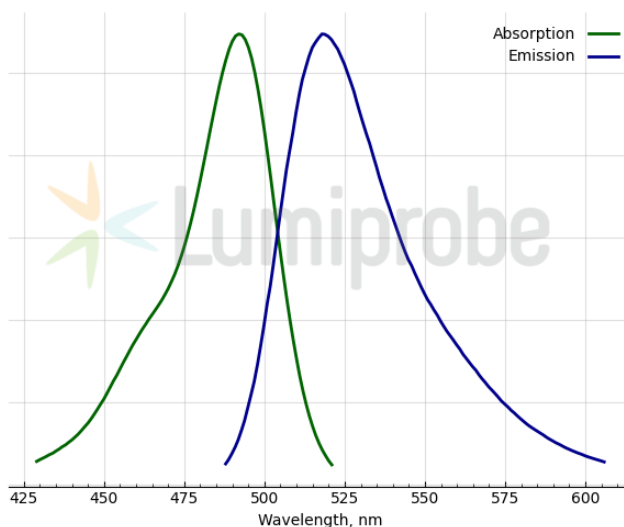
<http://www.lumiprobe.com/p/fam-dbc0-6>

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 1H , HPLC-MS (95%)
Storage conditions:	Storage: 24 months after receipt at $-20^\circ C$ 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
ϵ , $L \cdot mol^{-1} \cdot cm^{-1}$:	74000
Emission maximum, nm:	517
Fluorescence quantum yield:	0.93