

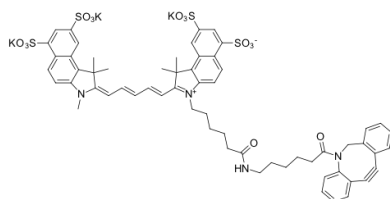
sulfo-Cyanine5.5 DBCO

<http://www.lumiprobe.com/p/sulfo-cy55-dbc>

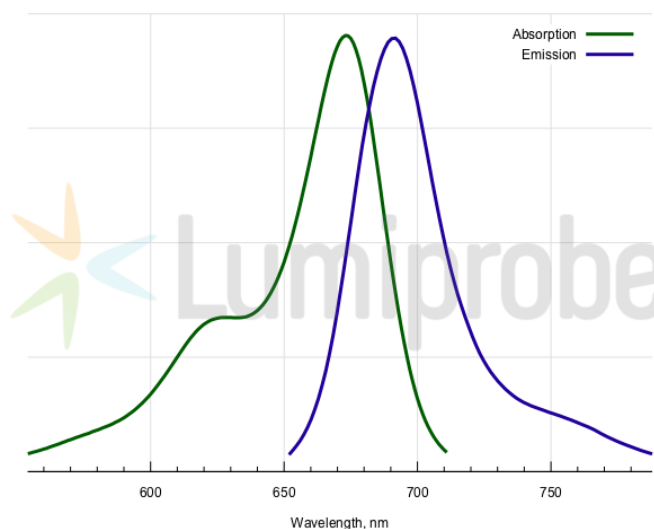
Sulfo-Cyanine5.5 is a dye with far-red emission approaching the NIR range. It has found application in non-invasive live-organism imaging. This particular derivative of sulfo-Cyanine5.5, the DBCO (or ADIBO) derivative, contains cycloalkyne for copper-free conjugation of this fluorophore with various organic azides.

The reaction between DBCO and azides is blazingly fast, orders of magnitude exceeding the rate of copper-catalyzed reaction between azides and terminal alkynes. It is also catalyst-free.

This reagent can be used to conjugate sulfo-Cyanine5.5 dye to a variety of azide-labeled molecules.



Structure of sulfo-Cyanine5.5 DBCO



Absorption and emission spectra of sulfo-Cyanine5.5

General properties

Appearance:	dark blue solid
Molecular weight:	1317.69
Molecular formula:	$C_{61}H_{59}N_4K_3O_{14}S_4$
Solubility:	good in water, DMF, DMSO
Quality control:	NMR 1H , HPLC-MS (95%)
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:	673
ϵ , $L \cdot mol^{-1} \cdot cm^{-1}$:	211000
Emission maximum, nm:	691
Fluorescence quantum yield:	0.21