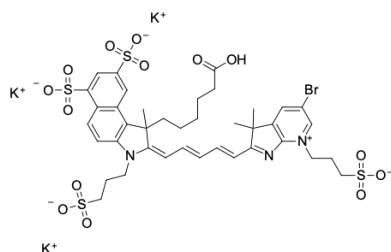


## AF 700 carboxylic acid

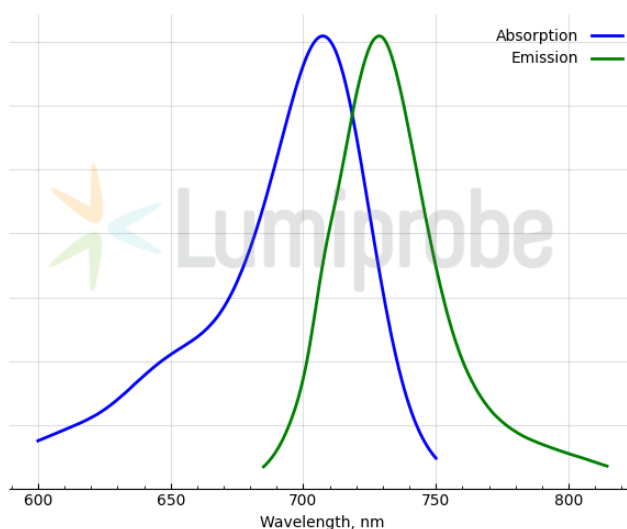
<http://www.lumiprobe.com/p/af700-carboxylic-acid>

AF 700 carboxylic acid is a highly photostable, water-soluble, near-infrared (NIR) fluorescent dye with a carboxylic acid reactive group. AF 700 is used in flow cytometry and fluorescence microscopy. It is ideal for multicolor detection panels due to minimal spectral overlap with other fluorophores, as well as for *in vivo* optical imaging, where deep tissue penetration with reduced scattering is desired.

The carboxylic acid moiety enables further modification of the dye for covalent attachment to amine-containing biomolecules (e.g., proteins, peptides, oligonucleotides) via carbodiimide coupling.



**Structure of AF 700 carboxylic acid**



**Absorption and emission spectra of AF 700**

### General properties

Appearance:	dark blue powder
Molecular weight:	1103.25
Molecular formula:	$C_{39}H_{43}BrK_3N_3O_{14}S_4$
Solubility:	water, DMSO, DMF
Quality control:	NMR $^1H$ and HPLC-MS (95+%)
Storage conditions:	24 months after receipt at $-20^\circ C$ 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, <i>in vitro</i> diagnostic purposes, in the manufacture of food or pharmaceutical products, in medical devices or in cosmetic products.

### Spectral properties

Excitation/absorption maximum, nm:	707
$\epsilon$ , $L \cdot mol^{-1} \cdot cm^{-1}$ :	162000
Emission maximum, nm:	728
Fluorescence quantum yield:	0.17
$CF_{260}$ :	0.13
$CF_{280}$ :	0.11