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Calibro® Fluor 610 carboxylic acid

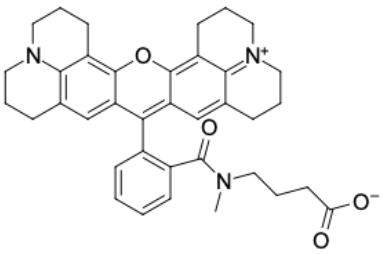
http://www.lumiprobe.com/p/cal-fluor-red-610-carboxylic-acid

Calibro® Fluor 610 is a vibrant fluorescent dye specifically designed for qPCR applications. This xanthene fluorophore is a spectral equivalent of carboxy-X-rhodamine (ROX).

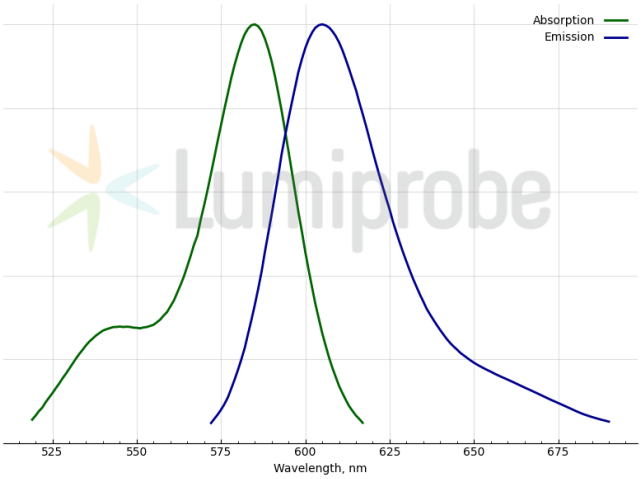
The dye is highly stable and withstands all stages of synthesis and processing of oligonucleotides. Due to its structure, the problem of multiple isomers does not arise during the conjugation of the dye with biomolecules. The dye derivatives have a single RP-HPLC peak and well-defined emission spectra, greatly facilitating their production.

The dye can be used in conjunction with the fluorescence quencher DusQ 2.

Calibro® Fluor 610 carboxylic acid is a non-reactive form of Calibro® Fluor 610 dye that can be used as a reference standard in experiments involving Calibro® Fluor 610 dye conjugates. Besides, the carboxylic group can react with hydrazines, hydroxylamines, and amines after activation by carbodiimides such as EDAC.



Structure of Calibro® Fluor 610 carboxylic acid



Absorption and emission spectra of Calibro® Fluor 610

General properties

Appearance:	dark crystals
Molecular weight:	589.74
Molecular formula:	$C_{37}H_{39}N_3O_4$
Solubility:	good solubility in methylene chloride, DMF, DMSO, acetonitrile, acetone, methanol; limited solubility in water; insoluble in ethyl acetate
Quality control:	NMR ^1H and HPLC-MS (95+%)
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:	585
Emission maximum, nm:	605
Fluorescence quantum yield:	0.87