

## CY<sub>anine</sub> Carboxyl

*CY<sub>anine</sub> fluorophores for labeling biomolecules*

### Introduction

A variety of **Cyanine dyes** has been used to label proteins, nucleic acids and other biomolecules for fluorescence techniques (imaging, biochemical analysis). They replace advantageously the conventional fluorochromes such as Fluorescein (FITC) and rhodamines (TRITC, RRR).

**CY<sub>anine</sub>3** can replace orange-fluorescent dyes, like Tetramethylrhodamine (TRITC).

CY<sub>anine</sub>3 is one of the most broadly used fluorophores which can be detected by various fluorometers, imagers, and microscopes. Due to inherently high extinction coefficient, this dye is also easily detected by naked eye on gels, and in solution. See also alternative superior dye: [FluoProbes547H](#).

**CY<sub>anine</sub>3.5** can replace SulfoRhodamine 101.

See also alternative superior dye: [FluoProbes594](#).

**CY<sub>anine</sub>5** can replace far red red fluorescent dyes.

During last years, CY<sub>anine</sub>5 fluorophore has become an incredibly popular label in life science research and diagnostics. Fluorophore emission has maximum in red region, where many CCD detectors have maximum sensitivity, and biological objects have low background. Dye color is very intense, therefore quantity as small as 1 nanomol can be detected in gel electrophoresis by naked eye. See also alternative superior dye: [FluoProbes647H](#)

**CY<sub>anine</sub>5.5** can replace near infrared fluorescent dyes.

See also alternative superior dye: [FluoProbes682](#).

**CY<sub>anine</sub>7** is a near infrared red fluorophores used in *in vivo* imaging applications.

See also alternative superior dye: [FluoProbes752](#).

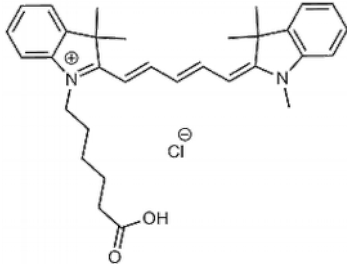
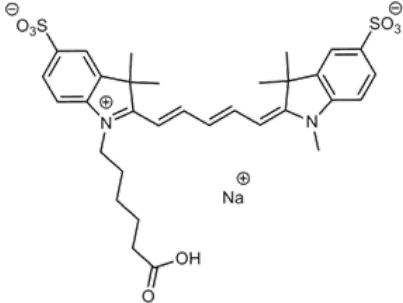
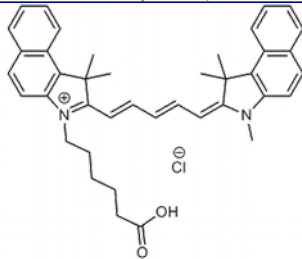
**CY<sub>anine</sub>7.5** is a near infrared red fluorophores used for *in vivo* imaging applications.

See also alternative superior dye: [FluoProbes800](#).

**Sulfo – CY<sub>anine</sub> dyes** are water-soluble form of the CY<sub>anine</sub> dyes. DiSulfonated forms are the most classic, but some tri- and quadri-sulfonated forms are available as well, for even higher hydrosolubility.

## Products Description

The table below gives main physical and fluorescence characteristics of the activated dyes

Product name cat.number/qty*	MW (g·mol <sup>-1</sup> ) +added MW	λ. abs./em. (nm)	mol. abs. (M <sup>-1</sup> cm <sup>-1</sup> )	Comment, structure
<b>CY<sub>anine</sub>5-Carboxyl</b> FP-OO2380, 5mg	519.12	646 / 662	250 000 QY: 0.28	
<b>DiSulfo-CY<sub>anine</sub>5-Carboxyl</b> FP-KV5740, 1mg FP-KV5741, 5mg FP-KV5744, 100mg	664.77	646 / 664	271 000 QY: 0.28	  Soluble in <b>water</b> and polar organic solvents (DMSO, DMF); Insoluble in organic solvents (DCM, chloroform)
<b>CY<sub>anine</sub>5.5-Carboxyl</b> FP-JV6831, 5mg	619.23	673 / 707	209 000 QY: 0.2	

**Storage:** -20°C, protected from light

### Related products

- EDAC, FP-WU5580
- MES Buffer, 14035B

## Ordering information

Catalog size quantities and prices may be found at [www.interchim.com/](http://www.interchim.com/)

Please inquire for higher quantities (availability, shipment conditions).

For any information, please ask : FluoProbes® / Interchim; Hotline : +33(0)4 70 03 73 06

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