



H10E

CY_{anine} dyes Labeling agents

CY_{anine} dyes are popular fluorescent dyes to be used in a variety of detection techniques. Many standard filters are designed/optimized for Cyanine reference dyes. See more information about the Cy label in the technical sheets.

CY_{anine} dyes are available derivatized with **a variety of functional groups**, such as [COOH & NH₂](#) and more, to allow any conventional and advanced conjugation chemistries, notably

- with reactivity **toward amines** ([NHS](#), IA, TFP), for standard conjugation of protein, peptides, aminoallyl nucleotides and other aminated molecule or support
- with reactivity **toward sulfhydryls** ([Maleimide](#)), for oriented Cy-conjugation of Cysteine-containing peptides,...
- with reactivity for **Click chemistry** ([NHS](#), [Azide](#), [Ethyne](#), [DBCO](#), [TCO](#)), for bio-orthogonal Cy-conjugation

Some CY_{anine} dyes are available

- with **mono-, di- and tri-sulfo groups** (improves hydro-solubility), **bis-NHS**
- with a **PEO ether** (confers resident hydrophilicity)

Fluorophore and alternative	MW [±] (g·mol ⁻¹)	λ _{exc} /λ _{em} (nm)	max. mol. abs. (M ⁻¹ cm ⁻¹)	Comments
CY_{anine} Blue				• See alternative superior dye FP405
CY_{anine}2 FP488	550.6	489 / 506	150 000	• Green fluorescent dye. See also alternative superior dye FP488
CY_{anine}3 FP547H	590.2	555 / 570	150 000	• Green absorbing dye, orange-to-red fluorescence-emitting dye • Can replace FITC. See also alternative superior dye FP547H
CY_{anine}3.5 FP594	679.3	591 / 604	116 000	• Red fluorescence-emitting dye. Can replace SulfoRhodamine 101, TR, A594, DL594. See also alternative superior dye FP594
CY_{anine}5 FP647H	616.2	646 / 662	250 000	• Far-red fluorescence-emitting dye. Nice with CCD detectors • Can replace A647. See also alternative superior dye. FP647H
CY_{anine}5.5 FP682	758.4	674 / 707	209 000	• Near-infrared (IR) fluorescence-emitting dye. • Can replace A680. See also alternative superior dye FP682
CY_{anine}7 FP752	~800	740 / 773	242 000	• Invisible IR fluorescence-emitting dye. Nice for in vivo imaging applications. See alternative superior dye FP752
CY_{anine}7.5 FP800	~750	788 / 808	223 000	• Invisible IR fluorescence-emitting dye. Nice for in vivo imaging • See also alternative superior dye FP800
Full list (on line): >300 items				Other alternative superior FluoProbes dyes

Highlight • PEGylated CYanine

PEG spacer (PolyEthylenGlycol) confers hydrophilicity not only to the compound (to improve dissolution, and possible concentration during coupling) but also to the final conjugate.

<u>CY_{anine}5-PEGs</u>	cat.number/qty*
Cy5 PEG amine MW 5000 (Cy5-PEG-NH ₂)	FP-1L0970, 5mg
Cy5 PEG acid MW 5000 (Cy5-PEG-COOH)	FP-1L0980, 5mg
Cy5 PEG hydroxyl MW 5000 (Cy5-PEG-OH)	FP-1L0990, 5mg
Cy5 PEG Thiol MW 5000 (Cy5-PEG-SH)	FP-1B7350, 5mg
Cy5 PEG NHS MW 5000 (Cy5-PEG-	FP-1I2240, 5mg
Cy5 PEG Maleimide MW 5000 (Cy5-PEG-MAL)	FP-1L1000, 5mg
Cy5 PEG Biotin MW 5000 (Cy5-PEG-Biot)	FP-1L1010, 5mg

Other MW: please [inquire](#), i.e. Cy5-PEG-NHS MW2000 (1I2220), MW:3400 (1I2230)

Other CYanines: (Cy3, Cy7): please [inquire](#)

Other dyes: FITC/Rhodamine,... AF, FluoProbes...: please [inquire](#)

*:inquire for other quantities (i.e.50mg, bulk)

Related products/documents

- See also
- [Remarkable conjugation tools](#): PEO crosslinkers (hydrophilic spacers), Hydrazone chemistry (flexible method using stable activation step), Click Chemistry & Staudinger ligation (versatile and mild conjugation), ...
- [Dialysis and Desalting tools](#) – CelluSep tubings, SpectraPor tubings, GebaFlex, FloatALyser, SlideALyser,...
- Other Fluorescent labeling dyes
- Back to [Products HighLights Overview](#)

Information inquire

Reply by Fax : +33 (0) 4 70 03 82 60 or email at interbiotech@interchim.com

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