

PRODUCT INFORMATION



Cy7

Item No. 30395

CAS Registry No.: 943298-08-6

Formal Name: 2-[7-[1-(5-carboxypentyl)-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1,3,5-heptatrien-1-yl]-1-ethyl-3,3-dimethyl-5-sulfo-3H-indolium, inner salt

MF: C₃₅H₄₂N₂O₈S₂

FW: 682.8

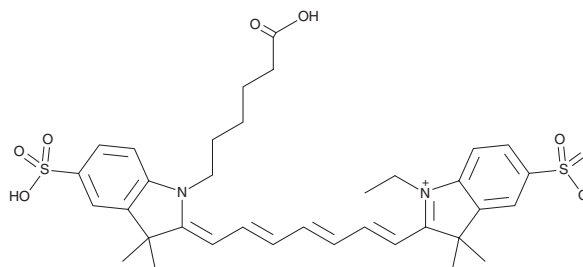
Purity: ≥98%

UV/Vis.: λ_{max}: 754 nm

Supplied as: A crystalline solid

Storage: -20°C

Stability: ≥2years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Cy7 is supplied as a crystalline solid. A stock solution may be made by dissolving the Cy7 in the solvent of choice, which should be purged with an inert gas. Cy7 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of Cy7 in ethanol is approximately 5 mg/ml and approximately 10 mg/ml in DMSO and DMF.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of Cy7 can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of Cy7 in PBS, pH 7.2, is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Cy7 is a cyanine-containing fluorochrome.¹ It displays excitation/emission maxima of 745/800 nm, respectively.² Cy7 has commonly been conjugated to secondary antibodies for use in fluorescence microscopy and flow cytometry.¹

References

1. Berlier, J.E., Rothe, A., Buller, G., *et al.* Quantitative comparison of long-wavelength alexa fluor dyes to Cy dyes: Fluorescence of the dyes and their bioconjugates. *J. Histochem. Cytochem.* **51(12)**, 1699-1712 (2003).
2. Xiao, L., Zhang, Y., Liu, Z., *et al.* Synthesis of the cyanine 7 labeled neutrophil-specific agents for noninvasive near infrared fluorescence imaging. *Bioorg. Med. Chem. Lett.* **20(12)**, 3515-3517 (2010).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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