

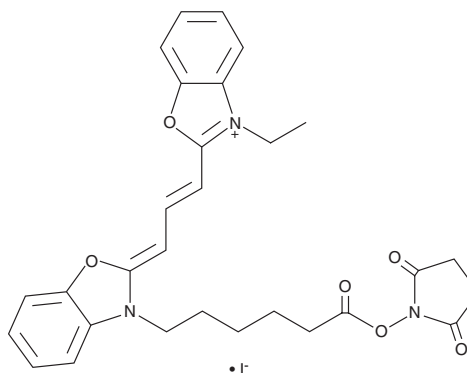
# PRODUCT INFORMATION



## Cy2-SE

Item No. 30394

**CAS Registry No.:** 186205-33-4  
**Formal Name:** 2-[3-[3-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-2(3H)-benzoxazolylidene]-1-propen-1-yl]-3-ethyl-benzoxazolium, monoiodide  
**Synonyms:** Cy2 NHS Ester, N-hydroxysuccinimidyl Ester Cy2  
**MF:** C<sub>29</sub>H<sub>30</sub>N<sub>3</sub>O<sub>6</sub> • I  
**FW:** 643.5  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 486 nm  
**Ex./Em. Max** 473/510 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



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

### Laboratory Procedures

Cy2-SE is supplied as a crystalline solid. A stock solution may be made by dissolving the Cy2-SE in the solvent of choice, which should be purged with an inert gas. Cy2-SE is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of Cy2-SE in DMSO and DMF is approximately 10 and 30 mg/ml, respectively. Cy2-SE is slightly soluble in ethanol.

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 Cy2-SE can be prepared by directly dissolving the crystalline solid in aqueous buffers. Cy2-SE is slightly soluble in PBS (pH 7.2). For maximum solubility in aqueous buffers, Cy2-SE should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Cy2-SE has a solubility of approximately 0.50 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Cy2-SE is an amine-reactive fluorescent probe.<sup>1</sup> It has commonly been used to label proteins.<sup>1,2</sup> Cy2-SE displays excitation/emission maxima of 473/510 nm, respectively.<sup>3</sup>

### References

1. Coombs, K.M. Update on proteomic approaches to uncovering virus-induced protein alterations and virus-host protein interactions during the progression of viral infection. *Expert Rev. Proteomics* **17(7-8)**, 513-532 (2020).
2. Park, H., Ha, J., Koo, J.Y., et al. Label-free target identification using in-gel fluorescence difference via thermal stability shift. *Chem. Sci.* **8(2)**, 1127-1133 (2017).
3. Nikolić, A., Perić, M., Ladouce, R., et al. Death by UVC light correlates with protein damage in isogenic human tumor cells: Primary tumor SW480 versus its metastasis SW620. *J. Proteomics Computational Biol.* **2(1)**, 1-12 (2016).

#### 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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