

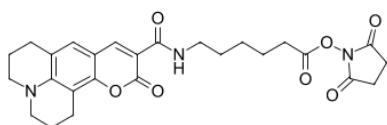
## AF 343 (Coumarin)-X-NHS ester

<http://www.lumiprobe.com/p/coumarin-343-x-nhs-ester>

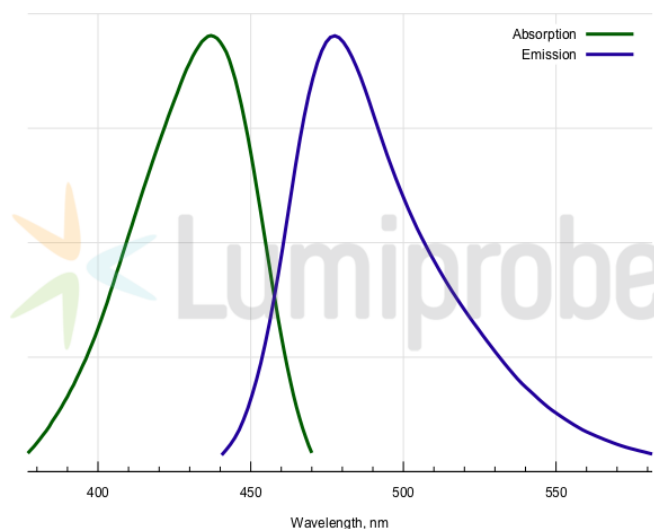
Blue emitting AF 343 (Coumarin) dye can form a FRET pair with fluorescein (FAM). An amine reactive form, activated NHS ester.

This amine-reactive NHS ester contains an aminohexanoyl linker between the fluorophore, and the reactive group. This linker provides better solubility and spatial separation between the fluorophore, and the target molecule being labeled.

This reagent can be used to design FRET based assays with FAM as acceptor, and to construct systems which harvest blue light energy.



**Structure of AF 343 (Coumarin) X NHS ester**



**Absorption and emission spectra of AF 343 (Coumarin)**

### General properties

|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Appearance:         | yellow solid                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Molecular weight:   | 495.52                                                                                                                                                                                                                                                                                                                                                                                                                         |
| CAS number:         | 946123-12-2                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Molecular formula:  | C <sub>26</sub> H <sub>29</sub> N <sub>3</sub> O <sub>7</sub>                                                                                                                                                                                                                                                                                                                                                                  |
| Solubility:         | good in DCM, DMSO, DMF                                                                                                                                                                                                                                                                                                                                                                                                         |
| Quality control:    | NMR <sup>1</sup> H, HPLC-MS (95%)                                                                                                                                                                                                                                                                                                                                                                                              |
| Storage conditions: | Storage: 12 months after receipt at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Avoid prolonged exposure to light. 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:         | 437   |
| ε, L·mol <sup>-1</sup> ·cm <sup>-1</sup> : | 39000 |
| Emission maximum, nm:                      | 477   |
| Fluorescence quantum yield:                | 0.63  |
| CF <sub>260</sub> :                        | 0.29  |
| CF <sub>280</sub> :                        | 0.24  |