Product Data Sheet

Product Name: HiLyte Fluor™ 647 C2 maleimide
Size: 1 mg
Catalog Number: AS-81259
Molecular Weight: 1196.46
Solvent: Water or DMF

Product Description: HiLyte Fluor™ 647 C2 maleimide is an excellent thiol-reactive fluorescent labeling dye that can be used to generate protein conjugates that are slightly red-shifted compared to those of Cy5™ dyes, resulting in optimal match to filters designed for Cy5 dyes. However, according to data supplied by other companies, total fluorescence of secondary antibody conjugates of HiLyte Fluor™ 647 dyes is significantly higher than those of Cy5™ conjugates. Also, unlike Cy5 dyes, HiLyte Fluor™ 647 dyes have very minimal change in absorption or fluorescence spectra when conjugated to most proteins, oligonucleotides and nucleic acids, thus yielding greater total fluorescence at the same degree of substitution. Additionally, in-house data indicated that HiLyte Fluor™ 647 is superior to Cy5™ in fluorescence polarization-based assays.

Spectra: Maximum Ex/Em wavelength is 649/674 nm.
Fluorescence Intensity: Performance of dye-goat anti-rabbit IgG conjugates

Photostability: HiLyte Fluor™ 647, Alexa Flour™ 647 and Cy5™ photostability over time

Stock Solution Preparation: Prepare 10 mg/ml dye stock solution in water. Completely dissolve all dye content by vortexing. Dye solution should be prepared fresh, immediately before an experiment. Long-term storage in solution form may reduce dye activity. Any solution containing the dye should be protected from light.

Shelf Life and Storage: Shelf life is two years if stored at -20C, desiccated and protected from light.

Related Products:

<table>
<thead>
<tr>
<th>Catalog#</th>
<th>Product Name</th>
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</thead>
<tbody>
<tr>
<td>AS-81255</td>
<td>HiLyte Fluor™ 647 acid</td>
</tr>
<tr>
<td>AS-81256</td>
<td>HiLyte Fluor™ 647 acid, SE</td>
</tr>
<tr>
<td>AS-81257</td>
<td>HiLyte Fluor™ 647 amine</td>
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</tbody>
</table>

This product is for in vitro research use only