

AzoDye-1-PEG10-Azide

Catalog Number: 2413

Unit Size: 1 mg

Product Details

Storage Conditions Freeze (< -15 °C), Minimize light exposure

Expiration Date 12 months upon recieving

Chemical Properties

Appearance Solid dark brown-red

Molecular Weight 1013.16

Soluble In DMSO

Chemical Structure



Spectral Properties

Excitation Wavelength N/A

Emission Wavelength N/A

Applications

AzoDye-1 PEG10 azide is an excellent building block for labeling alkyne-containing molecules. It contains a PEG10 spacer that significantly improves its water solubility compared to AzoDye-1 azide (#2412) although both AzoDye-1 azide (#2412) and AzoDye-1 PEG10 azide (#2413) bear the same extremely hydrophobic BHQ-1 chromophore. AzoDye-1 dyes are nearly non-fluorescent with moderate extinction coefficients. These dark quenchers are most typically used in Molecular Beacon probes in which FRET has minimal contribution to their fluorescence quenching, thus dependence on donor-acceptor spectral overlap is not significant as to other FRET probes such as FRET peptides. AzoDye-1 dyes can quench a variety of fluorophores, in particular, fluorescein derivatives such as FAM, HEX, TET, NED and JOE. This may reflect the AzoDye-1's ability to form stable, non-fluorescent complexes with a fluorophore.