

In addition to stabilization provided by the electron donating methyl group, the electron donating alkoxy substituent on the aromatic ring further improves the stability of Methyltetrazine-PEG4-NHS Ester. The aqueous solubility of this reagent is substantially enhanced by a hydrophilic polyethylene glycol (PEG) spacer arm.

Photo Cleavage Protocol Cleavage occurs by irradiation with near-UV light (300-350 nm, >90% cleavage occurs within 5-25 minutes. Try using a Black Ray XX-15 UV lamp (Ultraviolet Products Inc., San Gabriel, CA) at a distance of 15 cm (emission peak 365 nm, 300 nm cut-off, 1.1 mW intensity at~31 cm).

References

1. Devaraj, N.K. and Weissleder, R. Biomedical Applications of Tetrazine Cycloadditions. *Acc Chem Res.*(2011) 44: 816–827