

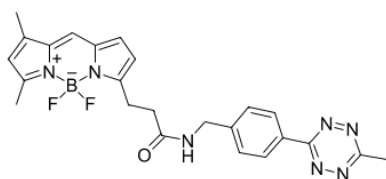
BDP FL tetrazine

<http://www.lumiprobe.com/p/bodipy-fl-tetrazine>

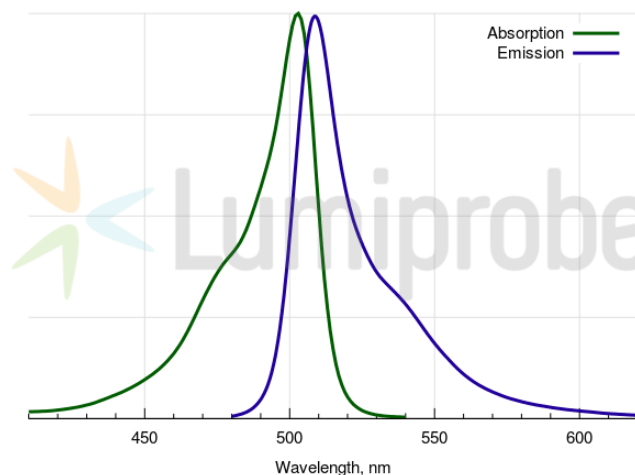
Inverse electron demand Diels-Alder reaction (ied-DA) with tetrazines is a promising tool for the conjugation of biomolecules. The reaction takes place between tetrazine as an electron acceptor heterodiene, and a strained dienophile, such as trans-cyclooctene, cyclopropene, or some cyclooctynes.

Methyltetrazine provides greater stability in buffers than unsubstituted tetrazine. The rate of its reaction with cycloalkenes still beats almost all other conjugation reaction rates by a factor of magnitudes.

BDP FL is a bright dye for fluorescein (FAM) channel. Using BDP FL tetrazine, the dye can be conjugated with molecules bearing strained olefins.



Structure of BDP FL tetrazine



Absorption and emission spectra of BODIPY FL

General properties

Appearance:	red crystalline solid
Mass spec M+ increment:	447.2
Molecular weight:	475.3
CAS number:	2042193-77-9
Molecular formula:	C ₂₄ H ₂₄ N ₇ BF ₂ O
Solubility:	good in DCM, DMSO, DMF
Quality control:	NMR ¹ H, HPLC-MS (95%)
Storage conditions:	Storage: 24 months after receipt at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Avoid prolonged exposure to light. Desiccate.
TN VED Code:	3204190000

Spectral properties

Excitation maximum, nm:	503
ε, L·mol ⁻¹ ·cm ⁻¹ :	92000
Emission maximum, nm:	509
Fluorescence quantum yield:	0.97
CF ₂₆₀ :	0.015
CF ₂₈₀ :	0.027