

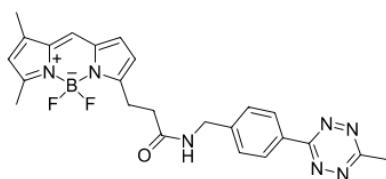
BDP® FL tetrazine

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

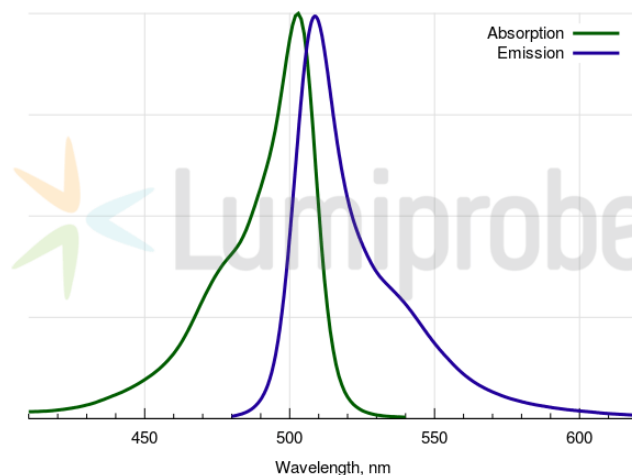
Inverse electron demand Diels-Alder reaction (IEDDA) with tetrazines is a promising tool for the conjugation of biomolecules. The reaction takes place between tetrazine as an electron acceptor heterodiene, and a strained dienophile, such as trans-cyclooctene, cyclopropene, or some cyclooctynes.

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 BDP 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. |
| 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: | 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 |

