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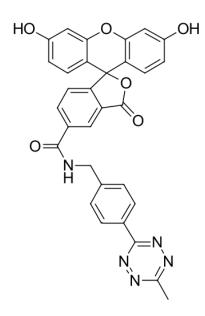
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FAM tetrazine, 5-isomer

http://www.lumiprobe.com/p/fam-tetrazine-5

Tetrazine (methyltetrazine) derivative of fluorescein, pure 5-isomer.

Tetrazines are reactive heterodiene components for [4+2] inverse electron demand Diels-Alder reaction (ied-DA) with strained cycloalkenes (trans-cyclooctenes, cyclopropenes). This reaction is also called TCO (tetrazine-cyclooctene) ligation. The reaction is among the fastest bioconjugation reactions.



Absorption Emission — 425 450 475 500 525 550 575 600 Wavelength, nm

Structure of 5-FAM tetrazine

FAM absorbance and emission spectra

General properties

Appearance: yellow solid
Mass spec M+ increment: 529.12
Molecular weight: 559.53

CAS number: 1619222-85-3 Molecular formula: $C_{31}H_{21}N_5O_6$

Solubility: good in DMF, DMSO

Quality control: NMR ¹H, HPLC-MS (95%)

Storage conditions: Storage: 24 months after receival at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Avoid prolonged exposure to light. Desiccate.

Spectral properties

Excitation/absorption maximum, nm: 492 ϵ , L·mol $^{-1}$ ·cm $^{-1}$: 74000 Emission maximum, nm: 517 Fluorescence quantum yield: 0.93 CF_{260} : 0.22 CF_{280} : 0.17