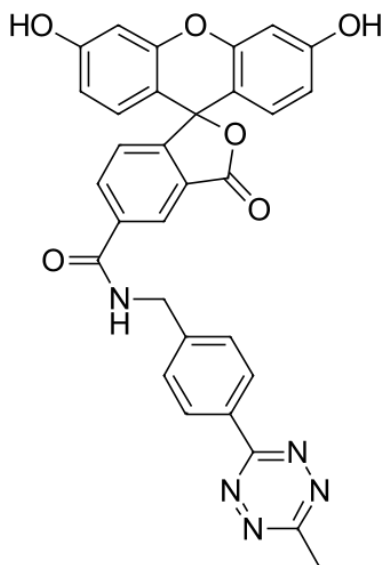


FAM tetrazine, 5-isomer

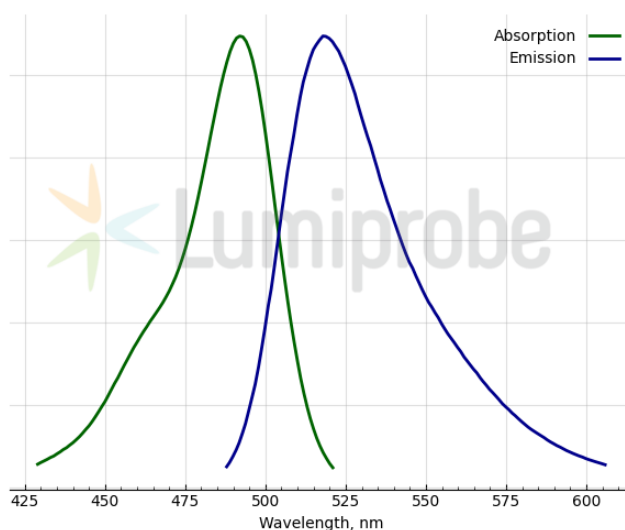
<http://www.lumiprobe.com/p/fam-tetrazine-5>

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.



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 ₅ O ₆
Solubility:	good in DMF, DMSO
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.

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