

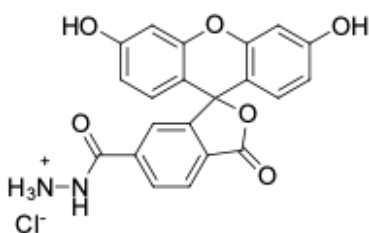
FAM hydrazide, 6-isomer

<http://www.lumiprobe.com/p/fam-hydrazide-6>

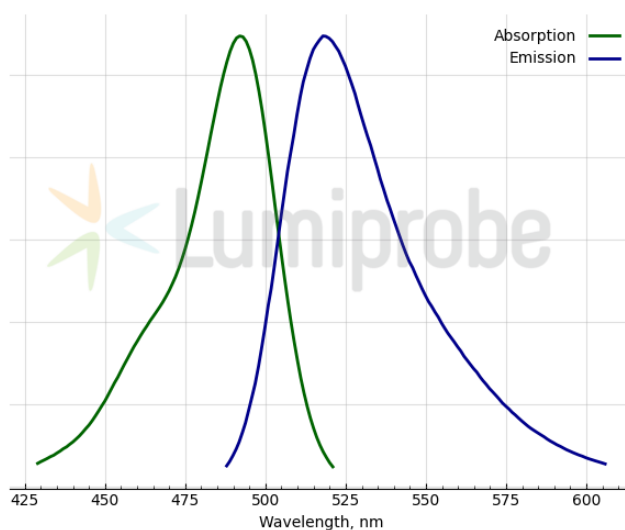
Fluorescein (FAM) is a xanthene dye, a parent of fluorescein dye series. This is a hydrazide derivative for the labeling of carbonyl compounds, aldehydes, and ketones.

Fluorescein is a bright dye that is compatible with a great number of instruments.

Carbohydrates are also often labeled with hydrazides by a protocol involving their oxidation with periodate first, and reacting with dye hydrazide after it.



Structure of 6-FAM hydrazide



FAM absorbance and emission spectra

General properties

Appearance:	yellow/orange solid
Mass spec M+ increment:	371.1
Molecular weight:	426.81
CAS number:	2183440-65-3 (hydrochloride); 151890-73-2
Molecular formula:	C ₂₁ H ₁₅ N ₂ ClO ₆
IUPAC name:	Spiro[isobenzofuran-1(3H),9'-[9H]xanthene]-6-carboxylic acid, 3',6'-dihydroxy-3-oxo-, hydrazide, hydrochloride
Solubility:	good in DMF, DMSO, alcohols
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:	522
Fluorescence quantum yield:	0.93
CF ₂₆₀ :	0.22
CF ₂₈₀ :	0.17