





Iodinated Fluorescein for Various Applications

Advantages

- Consistently supplied based on many years of manufacturing experience
- Reasonable price
- Available in large quantities

Tetraiodofluorescein 25g

Absorption and emission properties of T0124 and other halogenated fluoresceins

Fluorescein is widely used as a green fluorescence dye and is known to exhibit excellent absorption and emission properties. Halogenated fluoresceins, represented by T0124, show a red shift in excitation wavelength and fluorescence wavelength compared to fluorescein [F0095].

Products	X, Y	λ _{ex, max}	λ _{em, max}
Tetraiodofluorescein [T0124]	X=Y=I	535 nm	560 nm
Fluorescein [F0095]	X=Y=H	460 nm	521 nm
2',7'-Dichlorofluorescein [D0371]	X=H Y=Cl	511 nm	533 nm
Tetrabromofluorescein [T0035]	X=Y=Br	524 nm	552 nm

Applications

T0124 has been reported to be applied to organic photocatalytic reactions due to its excellent photocatalytic performance of iodine on the xanthene ring.¹⁾

 $(X = O/N, R^1 = alkyl, R^2 = alkyl, R^3 = H/alkyl/aryl)$

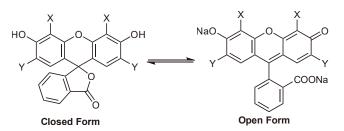
The hydroxy groups of **T0124** allow chemical modification while retaining fluorescent properties, and the use of **T0124** as a fluorescent label for dendrimers has been reported.²⁾

References 1) I. I. Roslan, M. A. Gondal, G. K. Chuah, et al., Adv. Synth. Catal. 2018, 360, 1584. https://doi.org/10.1002/adsc.201701565 2) A. Sharma, D. Mejía, D. Maysinger, A. Kakkar, RSC Adv. 2014, 4, 19242. https://doi.org/10.1039/C4RA02713B

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Related Products

An open-ring form of each halogenated fluorescein is also available.



	Closed Form	Open Form
X=I, Y=I	T0124	T0557
X=H, Y=H	F0095	F0096
X=H, Y=CI	D0371	D0424
X=Br, Y=Br	T0035	T0037

[Closed Form]

X=H, Y=H Fluorescein 25g / 100g / 500g [F0095] 2',7'-Dichlorofluorescein X=H, Y=CI 1g / 25g [D0371] **Tetrabromofluorescein** X=Br, Y=Br 25q [T0035]

[Open Form]

X=I, Y=I**Tetraiodofluorescein Sodium Salt** 25g [T0557] X=H, Y=H Fluorescein Sodium Salt 25g / 100g / 500g [F0096] X=H, Y=CI 2',7'-Dichlorofluorescein Sodium Salt 1g / 25g [D0424] X=Br, Y=Br 2',4',5',7'-Tetrabromofluorescein Disodium Salt 25g [T0037]

We offer fluorescein derivatives with various substitutions.

5 = -NCS	Fluorescein 5-Isothiocyanate (isomer I)	100mg / 1g [F0026]
6 = -NCS	Fluorescein 6-Isothiocyanate (isomer II)	100mg [F0783]
5 = -COOH	5-Carboxyfluorescein	100mg [C2477]
6 = -COOH	6-Carboxyfluorescein	100mg [C2478]
5 = -CO-NHS	5-Carboxyfluorescein N-Succinimidyl Ester	20mg / 100mg [C2479]
5 = -maleimide	Fluorescein-5-maleimide	25mg [F0810]
$5 = -NH_2$	5-Aminofluorescein (isomer I)	1g / 5g <mark>[A0306</mark>]
$6 = -NH_2$	6-Aminofluorescein (isomer II)	1g / 5g <mark>[A0864]</mark>
5 = -CONH-Alkyne	5-FAM-Alkyne	25mg [F1222]

For further information please refer to our website at www.TClchemicals.com. >>> TCI xanthene dyes





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