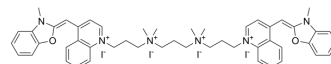


Thiazole orange dimer YOYO 1

Cat. No.:	HY-D0916
CAS No.:	143413-85-8
Molecular Formula:	C ₄₉ H ₅₈ I ₄ N ₆ O ₂
Molecular Weight:	1270.64
Target:	Fluorescent Dye
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

Thiazole orange dimer YOYO 1 is a green fluorescent dye used for DNA staining. It belongs to the monomethine cyanine dye family and is a tetracationic homodimer of oxazole yellow (abbreviated as YO, hence the name YOYO), usually provided as a tetraiodide salt. In aqueous buffer, the free YOYO-1 dye (λ_{max} 458 nm; λ_{max} 564 nm) has a very low fluorescence quantum yield, but after binding to double-stranded DNA through diintercalation, the fluorescence intensity is increased by 3200 times (λ_{max} 489 nm; λ_{max} 509 nm).

REFERENCES

[1]. Wang L, et al. Ultrafast Transient Absorption Spectra of Photoexcited YOYO-1 molecules call for additional investigations of their fluorescence quenching mechanism. *J Photochem Photobiol A Chem.* 2018 Dec 1;367:411-419.

Caution: Product has not been fully validated for medical applications. For research use only.

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