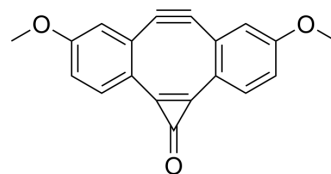


FI-DIBO

Cat. No.:	HY-D1506
CAS No.:	1407523-31-2
Molecular Formula:	C ₁₉ H ₁₂ O ₃
Molecular Weight:	288.3
Target:	Fluorescent Dye
Pathway:	Others
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



BIOLOGICAL ACTIVITY

Description	<p>FI-DIBO (fluorogenic dibenzocyclooctyne) is a selective and high sensitivity fluorescent probe to azide compounds. FI-DIBO can react rapidly with azide compounds to form new highly fluorescent products with a maximum emission wavelength of 469 nm and excitation wavelength of 363 nm. FI-DIBO can be used to label diazo-tagged proteins without detectable background signal interference^{[1][2]}. FI-DIBO is a click chemistry reagent, it contains an Alkyne group and can undergo copper-catalyzed azide-alkyne cycloaddition (CuAAC) with molecules containing Azide groups.</p>
In Vitro	<p>Guidelines (Following is our recommended protocol. This protocol only provides a guideline, and should be modified according to your specific needs). Labeling diazo-labeled proteins^{[2][3]}:</p> <ol style="list-style-type: none"> 1. Resuspend the protein with 1×PBS (pH 7.4) and incubate with NHS-activated ester (25 mM in DMSO) overnight at room temperature. 2. Labeled proteins are co-incubated with FI-DIBO (25-500 μM) at 37 °C for 18 h. 3. Protein SDS-PAGE gel analysis and in-gel fluorescence imaging analysis with λ_{ex}=365 nm, λ_{em}=480 nm. <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

REFERENCES

- [1]. Ke Wang, et al. A metal-free turn-on fluorescent probe for the fast and sensitive detection of inorganic azides. *Bioorg Med Chem Lett*. 2016 Apr 1;26(7):1651-4.
- [2]. Frédéric Friscourt, et al. Fluorogenic Strain-Promoted Alkyne-Diazo Cycloadditions. *Chemistry*. 2015 Sep 28;21(40):13996-4001. doi: 10.1002/chem.201502242. Epub 2015 Aug 18.
- [3]. Camille Favre, et al. Sydnone Reporters for Highly Fluorogenic Copper-Free Click Ligations. *J Org Chem*. 2018 Feb 16;83(4):2058-2066.

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

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