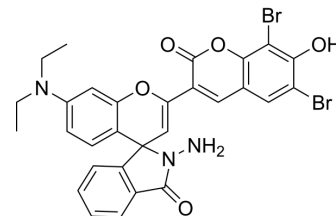


CB2-H

Cat. No.:	HY-152103
Molecular Formula:	C ₂₉ H ₂₃ Br ₂ N ₃ O ₅
Molecular Weight:	653.32
Target:	Fluorescent Dye
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	CB2-H is a dual-channel fluorescent probe for the simultaneous detection of HOCl and ONOO ⁻ . CB2-H enables the concurrent detection of HOCl and ONOO ⁻ at two independent channels without spectral cross-interference and can be applied for dual-channel fluorescence imaging of endogenously produced HOCl and ONOO ⁻ in living cells and zebrafish under different stimulants ^[1] .
In Vitro	ONOO ⁻ can selectively oxidize the hydrazide group of CB2-H to afford the parent dye CB2 (Abs _{max} /Em _{max} = 631/669 nm). In the case of HOCl, it undergoes an electrophilic attack on the benzopyran moiety of CB2-H to give a chlorinated product CB2-H-Cl, which inhibits the PET process within the probe and thus affords a turn-on fluorescence response at the coumarin channel (Abs _{max} /Em _{max} = 407/468 nm) ^[1] . CB2-H (5 μM; 30 min) is capable of concurrently monitoring endogenously produced HOCl and ONOO ⁻ in living cells and zebrafish under different stimulants ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Huang W, et al. Rational Design of a Dual-Channel Fluorescent Probe for the Simultaneous Imaging of Hypochlorous Acid and Peroxynitrite in Living Organisms. Anal Chem. 2022 Dec 20;94(50):17485-17493.

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

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