

HKPerox-2

Chemical Properties

CAS No. : 2245230-79-7

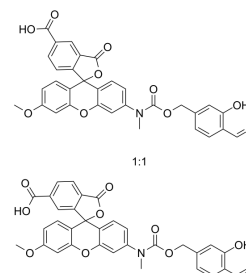
Formula:

Molecular Weight:

Keep away from direct sunlight

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



Biological Description

Description	HKPerox-2 is an excellently selective and sensitive green fluorescent probe toward H ₂ O ₂ over 30-fold other tested ROS/RNS in chemical and biological systems. HKPerox-2 is a O-methyl rhodol derivative and specifically recognize H ₂ O ₂ based on a tandem payne/dakin reaction.
Targets(IC50)	Others,Reactive Oxygen Species
In vitro	<p>HKPerox-2 is a O-methyl rhodol derivative and reaches a plateau within 30 min upon treatment of 100 μM H₂O₂, and the rate constants k_{obs} is determined to be 2.0x10⁻² s for HKPerox2[1].HKPerox-2 (0-20 μM; 24 hours) is nontoxic to cells at working concentrations in RAW264.7 macrophages[1].</p> <p>HKPerox-2 should be co-incubated with 100 μM of trichloroacetonitrile (CCl₃CN) for H₂O₂ detection and molecular imaging. DMSO should be avoided during H₂O₂ detection, as DMSO could scavenge activated H₂O₂ in the presence of CCl₃CN. DMF is the recommended solvent to prepare probe stock solution.</p>

Reference

Sen Ye, et al. Tandem Payne/Dakin Reaction: A New Strategy for Hydrogen Peroxide Detection and Molecular Imaging. Angew Chem Int Ed Engl. 2018 Aug 6;57(32):10173-10177.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only· Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481