
Product Data Sheet

Product Name: Msr-Ratio

Cat. No.: GC61557

Chemical Properties

Cas. No. 2290635-22-0

SMILES CS(C1=CC=C(/C=C/C(OC2=C3C=CC=C2)=CC3=O)C=C1)=O

Formula $C_{18}H_{14}O_3S$ M.Wt 310.37

Solubility DMSO : 100 mg/mL (322.20 mM; Need ultrasonic) Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure

Background

Msr-Ratio (Msr-green) is a ratiometric fluorescent probe of methionine sulfoxide reductase ($\lambda_{ex}=375$ nm, $\lambda_{em}=550$ nm). Msr-Ratio is used for monitoring the enzyme activity in vitro and in live cells[1].

Msr-Ratio is converted to its corresponding sulfide form by methionine sulfoxide reductase. Msr-Ratio displays favorable properties such as a nearly 400-fold fluorescence change, fast response rate (<30 min), large Stokes shift (120 nm), and green emission (550 nm)[1]. There is a very weak background signal in live HL60 cells after the addition of Msr-Ratio. As the Msr-Ratio (10 μ M) incubation time increased in cells from 0 to 8 h, the fluorescence signal constantly strengthened[1].

[1]. Liangwei Zhang, et al. A ratiometric fluorescent probe of methionine sulfoxide reductase with an improved response rate and emission wavelength. Chem Commun (Camb). 2019 Jan 29;55(10):1502-1505.

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA