Heme Oxygenase-1-IN-1

Cat. No.: HY-111798

CAS No.: 1093058-52-6

Molecular Formula: $C_{13}H_{15}BrN_2$

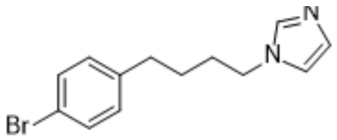
Molecular Weight: 279.18

Target: Reactive Oxygen Species

Pathway: Immunology/Inflammation; Metabolic Enzyme/Protease; NF-κB

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	2 years
	-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 125 mg/mL (447.74 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	3.5819 mL	17.9096 mL	35.8192 mL
	5 mM	0.7164 mL	3.5819 mL	7.1638 mL
	10 mM	0.3582 mL	1.7910 mL	3.5819 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Heme Oxygenase-1-IN-1 (compound 2) is a potent heme oxygenase 1 (HO-1) inhibitor, with an IC_{50} of 0.25 μM. Heme Oxygenase-1-IN-1 can be used for cancer research[1].

IC_{50} & Target

IC_{50}: 0.25 μM (HO-1)[1]

In Vitro

Heme Oxygenase-1-IN-1 (0-10 μM) attenuates Dipeptidyl peptidase-4 inhibitors (DPP-4i)-induced NF-κB activation in 4T1 cells[2].

Heme Oxygenase-1-IN-1 (0-10 μM) significantly decreases GC cell migration and invasion in parental gastric cancer cells[3].

Heme Oxygenase-1-IN-1 significantly down-regulates HO-1 mRNA level and metastasis-associated gene expressions in GRIM-19-deficient gastric cancer cells[3].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Cell Death Dis. 2022 Sep 26;13(9):822.
- Free Radic Biol Med. 2023 Mar 27;202:46-61.
- Front Oncol. 24 September 2021.
- Front Oncol. 2021 May 26;11:679816.
- Nitric Oxide. 8 October 2022.

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REFERENCES

[1]. Zeng X, et al. Mitochondrial GRIM-19 loss in parietal cells promotes spasmolytic polypeptide-expressing metaplasia through NLR family pyrin domain-containing 3 (NLRP3)-mediated IL-33 activation via a reactive oxygen species (ROS) -NRF2- Heme oxygenase-1(HO-1)-NF-κB axis. Free Radic Biol Med. 2023 Jun;202:46-61.

[2]. Wang X, et al. Mitochondrial GRIM-19 deficiency facilitates gastric cancer metastasis through oncogenic ROS-NRF2-HO-1 axis via a NRF2-HO-1 loop. Gastric Cancer. 2021 Jan;24(1):117-132.

[3]. Floresta G, et al. Development of new HO-1 inhibitors by a thorough scaffold-hopping analysis. Bioorg Chem. 2018 Dec;81:334-339.

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