Proteins

Product Data Sheet

D-erythro-MAPP

Cat. No.: HY-137422 CAS No.: 143492-38-0 Molecular Formula: C₂₃H₃₉NO₂ Molecular Weight: 361.56 Ceramidase Target:

Pathway: Metabolic Enzyme/Protease Storage: Powder -20°C 3 years

> In solvent -80°C 6 months

> > -20°C 1 month

SOLVENT & SOLUBILITY

In Vitro DMF: $\geq 20 \text{ mg/mL} (55.32 \text{ mM})$

> Ethanol : ≥ 20 mg/mL (55.32 mM) DMSO: $\geq 1 \text{ mg/mL} (2.77 \text{ mM})$

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.7658 mL	13.8290 mL	27.6579 mL
	5 mM	0.5532 mL	2.7658 mL	5.5316 mL
	10 mM	0.2766 mL	1.3829 mL	2.7658 mL

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

BIOLOGICAL ACTIVITY

Description D-erythro-MAPP (D-e-MAPP) is a ceramidase inhibitor, with an IC₅₀ of 1-5 μ M in vitro^[1].

In Vitro D-erythro-MAPP (D-e-MAPP) reduces the viability of MCF-7 cells in a dose-dependent manner with IC $_{50}$ value of 4.4 μ M, and

15.6 μ M, respectively^[1].

D-erythro-MAPP (D-e-MAPP) induces G0/G1 arrest in cell cycle progression resulting in growth suppression^[2].

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

Cell Viability Assay^[1]

Cell Line:	Human breast cancer MCF-7 cells.	
Concentration:	24 h.	
Incubation Time:	3.13-100 μM.	

Result:	Inhibited cell viability.

CUSTOMER VALIDATION

• J Adv Res. 2023 Oct 19:S2090-1232(23)00314-4.

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REFERENCES

[1]. Hüseyin İzgördü, et al. Characteristics of apoptosis induction in human breast cancer cells treated with a ceramidase inhibitor. Cytotechnology. 2020 Dec;72(6):907-919.

[2]. A Bielawska, et al. (1S,2R)-D-erythro-2-(N-myristoylamino)-1-phenyl-1-propanol as an inhibitor of ceramidase. J Biol Chem. 1996 May 24;271(21):12646-54.

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

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