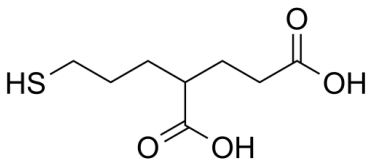
Data Sheet

Product Name:	2-MPPA
Cat. No.:	CS-0027694
CAS No.:	254737-29-6
Molecular Formula:	$C_8H_{14}O_4S$
Molecular Weight:	206.26
Target:	Carboxypeptidase
Pathway:	Metabolic Enzyme/Protease
Solubility:	DMSO : 100 mg/mL (484.82 mM; Need ultrasonic); Methanol : 250 mg/mL (1212.06 mM; Need ultrasonic)



BIOLOGICAL ACTIVITY:

2-MPPA (GPI-5693) is an orally active and selective **glutamate carboxypeptidase II (GCP II; PSMA)** inhibitor with an **IC_{50}** of 90 nM [1][2]. IC50 & Target: IC_{50}: 90 nM (GCP II)[2] **In Vivo:** 2-MPPA (10, 30 or 100 mg/kg) significantly attenuates Dizocilpine (HY-15084B) (0.1 mg/kg)-induced prepulse inhibition (PPI) deficits in mice, in a dose dependent manner. The efficacy of 2-MPPA on dizocilpine-induced PPI deficits is significantly antagonized by pretreatment with the selective group II metabotropic glutamate receptor (mGluR) antagonist LY341495 (HY-70059) (1.0 mg/kg)[1].

2-MPPA (30 mg/kg) significantly prevents the deficit in SNCV induced by both 5 and 25 mg/kg taxol by 96.3 ± 4.4% and 98.3± 11.6% respectively[2].

2-MPPA (10 mg/kg) inhibits tumor growth in the high expressor PSMA model CWR22RS by 70%[2].

References:

[1]. Takatsu Y, et al. Orally active glutamate carboxypeptidase II inhibitor 2-MPPA attenuates dizocilpine-induced prepulse inhibition deficits in mice. Brain Res. 2011 Jan 31;1371:82-6.

[2]. She Y, et al. 2-MPPA, a selective inhibitor of PSMA, delays prostate cancer growth and attenuates taxol-induced neuropathy in mice. Journal of Clinical Oncology, 2005, 23(16_suppl): 8054-8054.

CAIndexNames:

Pentanedioic acid, 2-(3-mercaptopropyl)-

SMILES:

O=C(O)C(CCCS)CCC(O)=O

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

Tel: 610-426-3128 Fax: 888-484-5008 E-mail: sales@ChemScene.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA