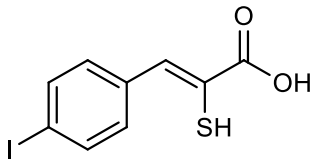
Catalog # 10-1515
PD-150606
179528-45-1
(Z)-3-(4-Iodophenyl)-2-mercapto-2-propenoic acid
Lot # S102014



A selective, cell-permeable non-peptide calpain inhibitor (K_i for μ- and m-calpains = 0.21 and 0.37 μM respectively). Acts at the calcium binding site of calpain rather than the substrate-binding site. Inhibits calpain activity in two intact cell systems. Attenuates hypoxic/hypoglycemic injury to cerebrocortical neurons in culture and excitotoxic injury to Purkinje cells in cerebellar slices.[1] Displays cytoprotective effects in oxidant- and calcium ionophore-induced cell death.[2] Some protective effects may be due to inhibition of MMP activity.[3]

1) Wang *et al*. (1996), *An alpha-mercaptoacrylic acid derivative is a selective nonpeptide cell-permeable calpain inhibitor and is neuroprotective*; Proc. Natl. Acad. Sci. USA, **93** 6687
2) Waters *et al*. (1997), *Calpains mediate calcium and chloride influx during the late phase of cell injury*; J. Pharmacol. Exp. Therap., **283** 1177
3) Ali *et al*. (2012), *Calpain inhibitors exhibit matrix metalloproteinase-2 inhibitory activity*; Biochem. Biophys. Res. Commun., **423** 1

PHYSICAL DATA

Molecular Weight:	306.12
Molecular Formula:	$C_9H_7IO_2S$
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 30 mg/ml), Ethanol (15 mg/ml)
Physical Description:	Yellow solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 3 months.

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