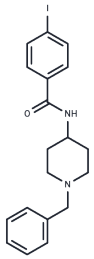
Data Sheet (Cat.No.T4596)

TargetMol

4-IBP

Chemical Properties



CAS No. : 155798-08-6

Formula: C19H21IN2O

Molecular Weight: 420.29

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	4-IBP is a selective σ1 agonist with high affinity for the σ1 receptor (Ki = 1.7 nM) and moderate affinity for the σ2 receptor (Ki = 25.2 nM).
Targets(IC50)	Apoptosis,Autophagy,Sigma receptor
In vitro	4-IBP is a σ1 receptor agonist, decreases the migration of human cancer cells, including glioblastoma cells. 4-IBP is used to investigate whether targeting theσ1 receptor could modify in vitro the migration rates of human cancer cells and increase the sensitivity of metastasizing human A549 NSCLC cells and infiltrating human glioblastoma cells to cytotoxic insults of either proapoptotic or proautophagic drugs.[1]
In vivo	4-IBP increases the antitumor effects of temozolomide and irinotecan in immunodeficient mice that were orthotopically grafted with invasive cancer cells.[1]

Solubility Information

Solubility	DMSO: 7.86 mg/mL (18.7 mM),Sonication is recommended. Ethanol: 5 mM,Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3793 mL	11.8965 mL	23.7931 mL
5 mM	0.4759 mL	2.3793 mL	4.7586 mL
10 mM	0.2379 mL	1.1897 mL	2.3793 mL
50 mM	0.0476 mL	0.2379 mL	0.4759 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Mégalizzi V, et al. 4-IBP, a sigma1 receptor agonist, decreases the migration of human cancer cells, including glioblastoma cells, in vitro and sensitizes them in vitro and in vivo to cytotoxic insults of proapoptotic and proautophagic drugs. Neoplasia. 2