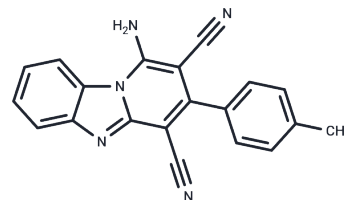


iFSP1

Chemical Properties

CAS No. :	150651-39-1
Formula:	C ₂₀ H ₁₃ N ₅
Molecular Weight:	323.35
Appearance:	no data available
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year



Biological Description

Description	iFSP1, a potent, selective, and glutathione-independent ferroptosis suppressor protein 1 (FSP1) (AIFM2) inhibitor with an EC ₅₀ of 103 nM, sensitizes diverse human cancer cell lines to ferroptosis inducers like (1S,3R)-RSL3. It uniquely triggers ferroptosis in GPX4-knockout cells overexpressing FSP1.
Targets(IC ₅₀)	Ferroptosis
In vitro	iFSP1 (0.001-1 μM; 24 hours) is less efficient than genetic deletion of FSP1, whereas iFSP1 treatment in the FSP1-knockout background had no additive effect to RSL3-induced ferroptosis. iFSP1 (3 μM; 24 hours) treatment results in an obvious toxicity of RSL3 in a panel of genetically engineered (FSP1-knockout) human cancer cell lines. AIFM2: the flavoprotein apoptosis-inducing factor mitochondria-associated 2 is a previously unrecognized anti-ferroptotic gene. AIFM2, which is renamed ferroptosis suppressor protein 1 (FSP1). iFSP1 (0.001-1 μM; 24 hours) inhibits the Gpx4-knockout cell growth as a dose-dependent manner, but does not inhibit the wild type cell growth. Treatment with the ferroptosis inhibitor Lip-1 protects GPX4- knockout cells from iFSP1-induced ferroptosis.

Solubility Information

Solubility	DMSO: 25 mg/mL (77.32 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	--

A DRUG SCREENING EXPERT

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.0926 mL	15.4631 mL	30.9262 mL
5 mM	0.6185 mL	3.0926 mL	6.1852 mL
10 mM	0.3093 mL	1.5463 mL	3.0926 mL
50 mM	0.0619 mL	0.3093 mL	0.6185 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.

Reference

Doll S, et al. FSP1 is a glutathione-independent ferroptosis suppressor. *Nature*. 2019 Nov;575(7784):693-698.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel: 781-999-4286 E_mail: info@targetmol.com Address: 36 Washington Street, Wellesley Hills, MA 02481