



Ferrostatin-1

Data Sheet

Catalog Number:	MC11096	Product Type:	Small Molecule
Bio-Activity:	Ferroptosis inhibitor	CAS #:	347174-05-4
Research Categories:	Cell death, oxidative stress, cancer	Chemical Name:	Ethyl 3-amino-4-(cyclohexylamino)benzoate
Solubility:	Soluble in DMSO (up to 100 mg/ml) or in Ethanol (up to 100 mg/ml).	Molecular Formula:	C15H22N2O2
Purity:	> 98%	Molecular Weight:	262.35
Format:	Powder	Ship Temp:	Ambient
Storage:	Room Temperature		

Application Notes

Description/Data:

Inhibits ferroptosis (EC50=60 nM), an iron-dependent form of nonapoptotic cell death [1]. Potent inhibitor of ferroptosis in cancer cells and glutamate-induced cell death in organotypic rat brain slices [1]. Blocks the cytotoxic effects of sorafenib in hepatocellular carcinoma cells [2]. Inhibits oxidative lipid damage and cell death in diverse disease models [3]. Prevents apoptosis of renal proximal tubular cells induced by reactive oxygen species [4].

References:

- 1) Dixon et al. (2012), Ferroptosis: an iron-dependent form of nonapoptotic cell death; *Cell*, 149 1060
- 2) Louandre et al. (2013), Iron-dependent cell death of hepatocellular carcinoma cells exposed to sorafenib; *Int. J. Cancer*, 133 1732
- 3) Skouta et al. (2014), Ferrostatins inhibit oxidative lipid damage and cell death in diverse disease models; *J. Am. Chem. Soc.*, 136 4551
- 4) Nowak et al. (2013), Protein kinase C- α interaction with iHSP70 in mitochondria promotes recovery of mitochondrial function after injury in renal proximal tubular cells; *Am. J. Physiol. Renal. Physiol.*, 305 F764

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