

Catalog # 10-1380 Ferrostatin-1

347174-05-4
Ethyl 3-amino-4-(cyclohexylamino)benzoate
Lot # X105303

Inhibits ferroptosis (EC₅₀=60 nM), an iron-dependent form of nonapoptotic cell death¹. Potent inhibitor of ferroptosis in cancer cells and glutamate-induced cell death in organotypic rat brain slices¹. Blocks the cytotoxic effects of sorafenib in hepatocellular carcinoma cells². Inhibits oxidative lipid damage and cell death in diverse disease models³. Prevents apoptosis of renal proximal tubular cells induced by reactive oxygen species⁴.

- 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-a interaction with iHSP70 in mitochondria promotes recovery of mitochondrial function after injury in renal proximal tubular cells; Am. J. Physiol. Renal. Physiol., **305** F764

PHYSICAL DATA

Molecular Weight: 262.35

Molecular Formula: C₁₅H₂₂N₂O₂

Purity: 98% by TLC

NMR: (Conforms)

Solubility: DMSO (up to 100 mg/ml) or Ethanol (up to 100 mg/ml)

Physical Description: Tan solid

Storage and Stability: Store as supplied desiccated at room temperature for up to 2 years from the date of purchase.

Solutions in DMSO or ethanol may be stored at -20°C for up to 1 month.

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