Chlorido[N,N'-disalicylidene-1,2-phenylenediamine]iron(III) Biochemical

Chlorido[N,N'-disalicylidene-1,2-phenylenediamine]iron(III)

CATALOG #
AAA227349

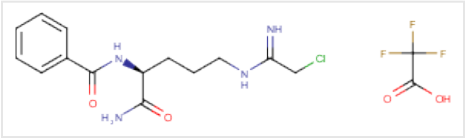
PRODUCT SYNONYMS

Chlorido[N; N'-disalicylidene-1; 2-phenylenediamine]iron(III); 2-phenylenediamine]iron(III) biochemical

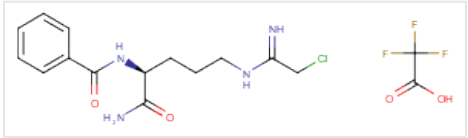
PRODUCT SPECIFICATIONS

Purity/Purification	98%
SMILES	[Cl-][Fe+3]123[N](C4=CC=CC=C4[N]2=CC5=CC=CC=C5[O-]3)=CC6=CC=CC=C6[O-]1
Formula	C20H14ClFeN2O2
CAS	39916-28-4
Solubility	DMSO: 14 mg/mL PBS (pH 7.2): Partially Soluble DMF: 20 mg/mL Ethanol: 0.3mg/mL <1mg/ml refers to the product slightly soluble or insoluble
Preparation and Storage	Powder: -20 degree C for 3 years In solvent: -80 degree C for 2 years

IMAGES



Structure
Cl-amidine TFA, CAS 1043444-18-3



Structure
Cl-amidine TFA, CAS 1043444-18-3

ADDITIONAL INFORMATION

Related Product Information for Chlorido[N,N'-disalicylidene-1,2-phenylenediamine]iron(III) biochemical	Chlorido[N,N'-disalicylidene-1,2-phenylenediamine]iron(III) is an inducer of ferroptosis.1 It induces ferroptosis, but not apoptosis or necroptosis, in NB1 cancer cells when used at a concentration of 3 uM.1 Chlorido[N,N'-disalicylidene-1,2-phenylenediamine]iron(III) inhibits proliferation of BJAB, NALM-6, Jurkat, MelHO, and MCF-7 cancer cells (IC50s = 0.07, 2.5, 1.5, 3, and 5 uM, respectively), as well as NALM-6 cells resistant to daunorubicin and vincristine when used at concentrations ranging from 0.04 to 0.125 uM.2
Product Categories/Family for Chlorido[N,N'-disalicylidene-1,2-phenylenediamine]iron(III) biochemical	Others

References	1. Yuan Luo, et al. Inhibitors and Inactivators of Protein Arginine Deiminase 4: Functional and Structural Characterization. Biochemistry. 2006 Oct 3; 45(39): 11727-11736. 2. Chumanevich AA, et al. Suppression of colitis in mice by Cl-amidine: a novel peptidylarginine deiminase inhibitor. Am J Physiol Gastrointest Liver Physiol. 2011 Jun;300(6):G929-38. 3. Witalison EE, et al. Molecular targeting of protein arginine deiminases to suppress colitis and prevent colon cancer. Oncotarget. 2015 Nov 3;6(34):36053-62. 4. Biron BM, et al., Cl-Amidine Prevents Histone 3 Citrullination and Neutrophil Extracellular Trap Formation, and Improves Survival in a Murine Sepsis Model. J Innate Immun. 2017;9(1):22-32.

NCBI AND UNIPROT INFORMATION

Molecular Weight	424.81

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: https://www.aaabiotech.com/biochemical/chloridonn-disalicylidene-12-phenylenediamineiron-iii/227349