

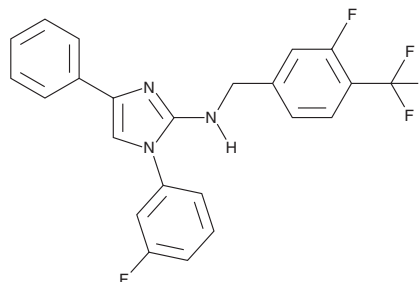
# PRODUCT INFORMATION



## FerroLOXIN-1

Item No. 39325

**CAS Registry No.:** 2773428-48-9  
**Formal Name:** 1-(3-fluorophenyl)-N-[[3-fluoro-4-(trifluoromethyl)phenyl]methyl]-4-phenyl-1H-imidazol-2-amine  
**MF:** C<sub>23</sub>H<sub>16</sub>F<sub>5</sub>N<sub>3</sub>  
**FW:** 429.4  
**Purity:** ≥90%  
**Supplied as:** A 10 mg/ml solution in methyl acetate  
**Storage:** -20°C  
**Stability:** ≥3 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

FerroLOXIN-1 is supplied as a solution in methyl acetate. To change the solvent, simply evaporate the methyl acetate under a gentle stream of nitrogen and immediately add the solvent of choice. FerroLOXIN-1 is soluble in chloroform.

### Description

FerroLOXIN-1 is an inhibitor of the 15-lipoxygenase-2 (15-LO-2) and phosphatidylethanolamine-binding protein 1 (PEBP1) catalytic complex.<sup>1</sup> It selectively inhibits the peroxidation of 1-stearoyl-2-arachidonoyl-*sn*-glycero-3-PE (Item No. 25871) by the 15-LO-2/PEBP1 complex over 15-LO-2 alone in cell-free assays when used at a concentration of 0.25 μM. FerroLOXIN-1 inhibits RSL3-induced ferroptosis in primary human bronchial epithelial cells (IC<sub>50</sub> = 84 nM). It increases survival in a mouse model of total body irradiation when administered at a dose of 25 mg/kg.

### Reference

1. Dar, H.H., Mikulska-Ruminska, K., Tyurina, Y.Y., *et al.* Discovering selective antiferroptotic inhibitors of the 15LOX/PEBP1 complex noninterfering with biosynthesis of lipid mediator. *PNAS* **120(25)**, e2218896120 (2023).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

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