

Product Data Sheet

Product Name: GPX4 Inhibitor 17

Cat. No.: GC92031

Chemical Properties

Cas. No.

SMILES [Fe].O=C(C#C)N(C1=CC=C(OC)C(Cl)=C1)C(c2ccccc2)C(NCCC3=CC=CC=C3)=O.c4ccccc4

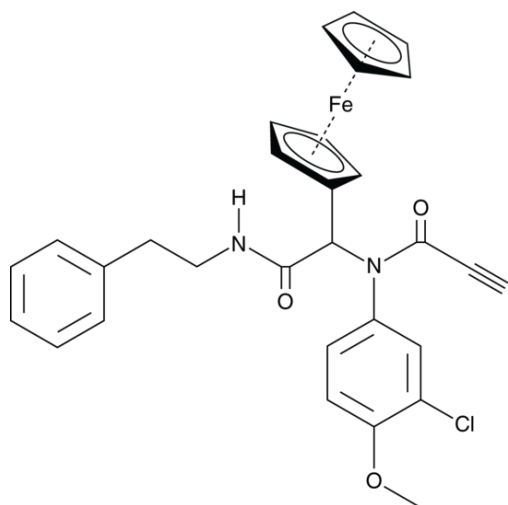
Formula $C_{30}H_{27}ClFeN_2O_3$ M.Wt 554.9

Solubility DMSO: Soluble: ≥ 10 mg/ml, Ethanol: Sparingly soluble: 1-10 mg/ml Storage $-20^{\circ}C$

General tips For obtaining a higher solubility, please warm the tube at $37^{\circ}C$ and shake it in the ultrasonic bath for a while. Stock solution can be stored below $-20^{\circ}C$ for several months.

Shipping Condition Evaluation sample solution: ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure



Background

GPX4 inhibitor 17 is a ferrocene-containing inhibitor of glutathione peroxidase 4 (GPX4) and an inducer of ferroptosis.¹ It inhibits GPX4 activity by 49.16% when used at a concentration of 1 μ M. GPX4 inhibitor 17 (0.5 μ M) increases the production of reactive oxygen species (ROS) and levels of malondialdehyde (MDA) in OS-RC-2 clear cell renal cell carcinoma cells. It induces ferroptosis in HT-

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

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1080 cells (IC_{50} s = 0.007 and 1.486 μ M, in the absence and presence of ferrostatin-1, respectively). GPX4 inhibitor 17 (20 mg/kg) reduces tumor volume and intratumoral GPX4 levels in an OS-RC-2 mouse xenograft model.

References:

[1]. Li, W., Yu, J., Wang, J., et al. How does ferrocene correlate with ferroptosis Multiple approaches to explore ferrocene-appended GPX4 inhibitors as anticancer agents Chem. Sci. 15(27)10477-10490(2024).

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