PRODUCT INFORMATION



Ferrostatin-1 Diyne

Item No. 25492

CAS Registry No.: 2226204-90-4

Formal Name: 3-amino-4-(2,4-nonadiyn-1-

ylamino)-benzoic acid, ethyl ester

MF: $C_{18}H_{22}N_2O_2$ FW: 298.4 **Purity:** ≥98%

 λ_{max} : 221, 241, 290, 319 nm A crystalline solid UV/Vis.:

Supplied as:

-20°C Storage: Stability: ≥4 years

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

Laboratory Procedures

Ferrostatin-1 diyne is supplied as a crystalline solid. A stock solution may be made by dissolving the ferrostatin-1 diyne in the solvent of choice, which should be purged with an inert gas. Ferrostatin-1 diyne is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of ferrostatin-1 diyne in ethanol and DMSO is approximately 10 mg/ml and approximately 30 mg/ml in DMF.

Ferrostatin-1 diyne is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ferrostatin-1 diyne should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Ferrostatin-1 diyne has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Ferrostatin-1 diyne is a ferroptosis inhibitor and analog of ferrostatin-1 (Item No. 17729).¹ It inhibits cell death induced by erastin (Item No. 17754) in HT-1080 cells when used at concentrations ranging from 0.01 to $1 \mu M$. Ferrostatin-1 diyne contains a diyne small vibrational tag and has been used to assess localization of ferrostatin-1 in HT-1080 cells using stimulated Ramen scattering microscopy.

Reference

1. Gaschler, M.M., Hu, F., Feng, H., et al. Determination of the subcellular localization and mechanism of action of ferrostatins in suppressing ferroptosis. ACS Chem. Biol. 13(4), 1013-1020 (2018).

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

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.

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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.**CAYMANCHEM**.COM