



Product Information

Product ID E681023

CAS No. 571203-78-6

Chemical Name

Synonym

Formula $C_{30}H_{31}ClN_4O_4$

Formula Wt. 547.0

Melting Point

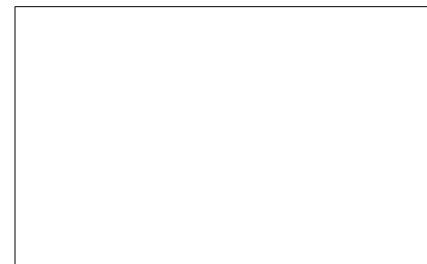
Purity $\geq 98\%$

Solubility

Store Temp $-20^{\circ}C$

Ship Temp Ambient

Description Erastin is a prototype ferroptosis-inducing compound that inhibits the system Xc⁻ cystine/glutamate antiporter (SLC7A11/xCT), blocking cellular cystine uptake and depleting glutathione (GSH). GSH depletion inactivates glutathione peroxidase 4 (GPX4), resulting in uncontrolled lipid peroxide accumulation and iron-dependent, non-apoptotic cell death termed ferroptosis. Erastin is one of the most widely used tools for studying ferroptotic cell death mechanisms and is particularly active in cancer cells expressing oncogenic RAS.



Pricing and Availability

Bulk quantities available upon request

Product ID	Size	List Price
E681023	5 mg	\$250.00
E681023	25 mg	\$625.00
E681023	100 mg	\$1500.00

- References**
1. Dixon SJ, Lemberg KM, Lamprecht MR, et al. Ferroptosis: an iron-dependent form of nonapoptotic cell death. *Cell*. 2012;149(5):1060-72. PMID: 22632970.
 2. Yagoda N, von Rechenberg M, Zaganjori E, et al. RAS-RAF-MEK-dependent oxidative cell death involving voltage-dependent anion channels. *Nature*. 2007;447(7146):864-8. PMID: 17568748.
 3. Jiang L, Kon N, Li T, et al. Ferroptosis as a p53-mediated activity during tumour suppression. *Nature*. 2015;520(7545):57-62. PMID: 25799988.
 4. Yang WS, SriRamaratnam R, Welsch ME, et al. Regulation of ferroptotic cancer cell death by GPX4. *Cell*. 2014;156(1-2):317-31. PMID: 24439385.
 5. Stockwell BR, Friedmann Angeli JP, Bayir H, et al. Ferroptosis: A Regulated Cell Death Nexus Linking Metabolism, Redox Biology, and Disease. *Cell*. 2017;171(2):273-285. PMID: 28753430.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.