



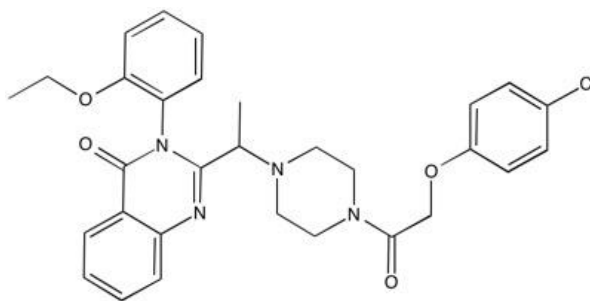
Catalog # 10-3406

Erastin

CAS# 571203-78-6

2-[1-[4-[2-(4-Chlorophenoxy)acetyl]-1-piperazinyl]ethyl]-3-(2-ethoxyphenyl)-4(3*H*)-quinazolinone

Lot # X108351



Ferroptosis inducer.¹ Inhibits the cysteine-glutamate antiporter, system X_c⁻ leading to activation of an ER stress response.² Inhibition of system X_c⁻ leads to cysteine starvation, glutathione depletion and induction of ferroptosis.³ Also blocks mitochondrial voltage-dependent anion channels (specifically VDAC2 and 3).⁴

- 1) Dolma *et al.* (2003), *Identification of genotype-selective antitumor agents using synthetic lethal chemical screening in engineered human tumor cells*; *Cancer Cell.*, **3** 285
- 2) Dixon *et al.* (2014), *Pharmacological inhibition of cystine-glutamate exchange induces endoplasmic reticulum stress and ferroptosis*; *Elife*, **3** e02523
- 3) Sato *et al.* (2018), *The ferroptosis inducer erastin irreversibly inhibits system x_c⁻ and synergizes with cisplatin to increase cisplatin's cytotoxicity in cancer cells*; *Sci. Rep.*, **8** 968
- 4) Yagoda *et al.* (2007), *RAS-RAF-MEK-dependent oxidative cell death involving voltage-dependent anion channels*; *Nature*, **447** 864

PHYSICAL DATA

Molecular Weight:	547.04
Molecular Formula:	C ₃₀ H ₃₁ ClN ₄ O ₄
Purity:	98% by HPLC/TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 10 mg/ml with warming)
Physical Description:	White solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

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