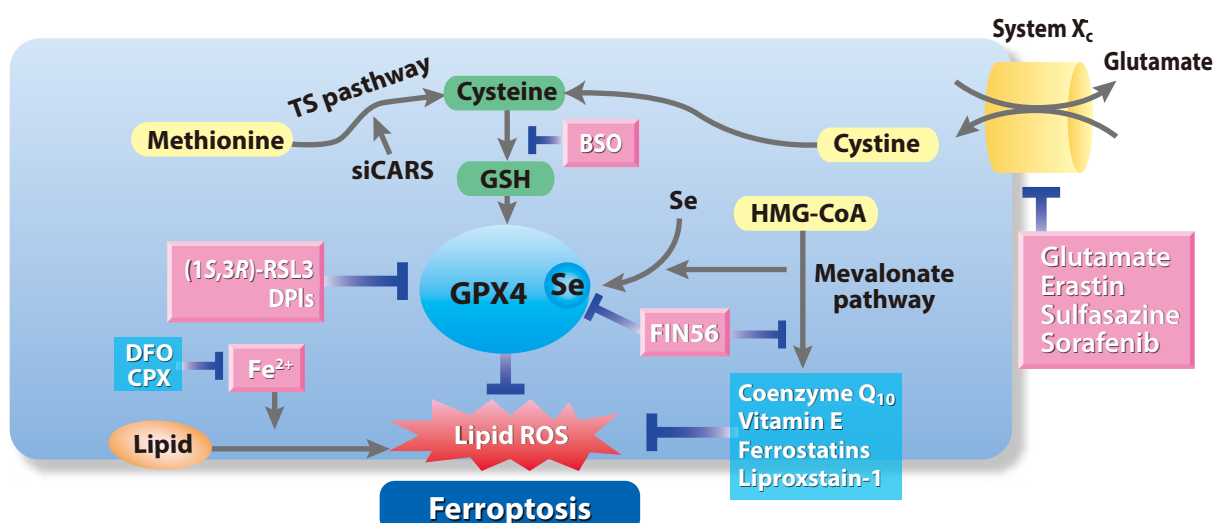


Ferroptosis Research Reagents

for iron-dependent programmed cell death

Ferroptosis is a recently recognized form of regulated cell death characterized by the accumulation of lipid peroxidation products and lethal reactive oxygen species (ROS) derived from iron metabolism. Activation of mitochondrial voltage-dependent anion channels and mitogen-activated protein kinases, upregulation of endoplasmic reticulum stress, and inhibition of cystine/glutamate antiporter is involved in the induction of ferroptosis. Morphologically, it is characterized by the presence of smaller than normal mitochondria with condensed mitochondrial membrane densities, reduction or vanishing of mitochondria crista, and outer mitochondrial membrane rupture.



Reference W. S. Yang, B. R. Stockwell, *Trends Cell Biol.* **2016**, *26*, 165.

Ferroptosis Inhibitors

Trolox Inhibits ferroptosis; antioxidant	1g / 5g [H0726]	Ebselen Inhibits ferroptosis; Inhibits lipoxygenase, cyclooxygenase nitric oxide synthase, protein kinase C and H ⁺ /K ⁺ -ATPase activity. Inhibits the hepatic carcinogenic effects of aflatoxin B ₁ .	25mg / 100mg [E0946]
Baicalein Inhibits ferroptosis; 5- and 1-lipoxygenase inhibitor	1g / 5g [T2721]	Idebenone Inhibits ferroptosis; blocks glutamate neurotoxicity in vitro and in vivo	1g / 5g / 25g [I0848]
Coenzyme Q₁₀ (= CoQ₁₀) Inhibits ferroptosis; antioxidant	100mg / 1g [C1971]		
Ferrostatin-1 Inhibits ferroptosis	25mg / 100mg [F1302]		

Ferroptosis Activators

L-Glutamic Acid Induces ferroptosis; endogenous, non-selective agonist	25g / 500g [G0059]	Sulfasalazine Induces ferroptosis; cystine-glutamate antiporter inhibitor and inhibitor of NF-κB activation	25g [S0580]
Simvastatin Induces ferroptosis; HMG-CoA reductase inhibitor	100mg / 1g [S0509]		

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