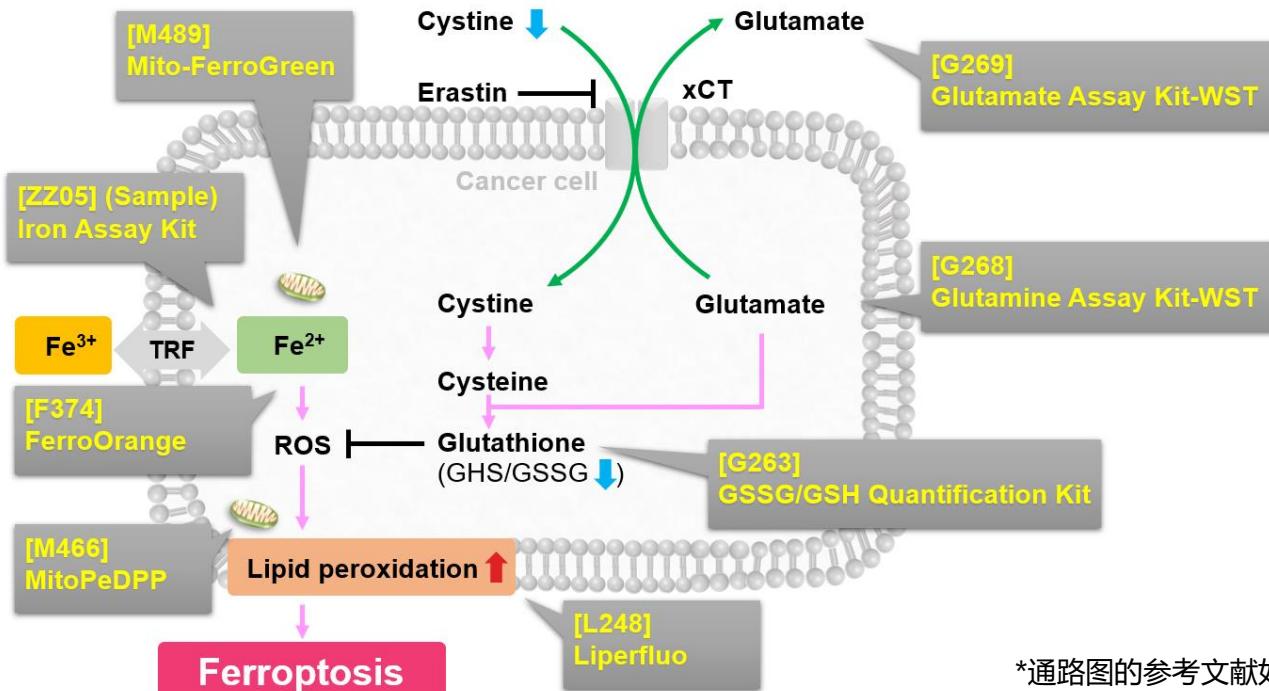


同仁化学研究所

铁死亡(Ferroptosis)

相关产品介绍



*通路图的参考文献如下

1. B.R. Stockwell et al., "Ferroptosis: A Regulated Cell Death Nexus Linking Metabolism, Redox Biology, and Disease", *Cell*, 2017, 171(2), 273.
2. V. E. Kagan et al., "Oxidized Arachidonic/Adrenic Phosphatidylethanolamines Navigate Cells to Ferroptosis", *Nat. Chem. Biol.*, 2017, 13(1), 81.

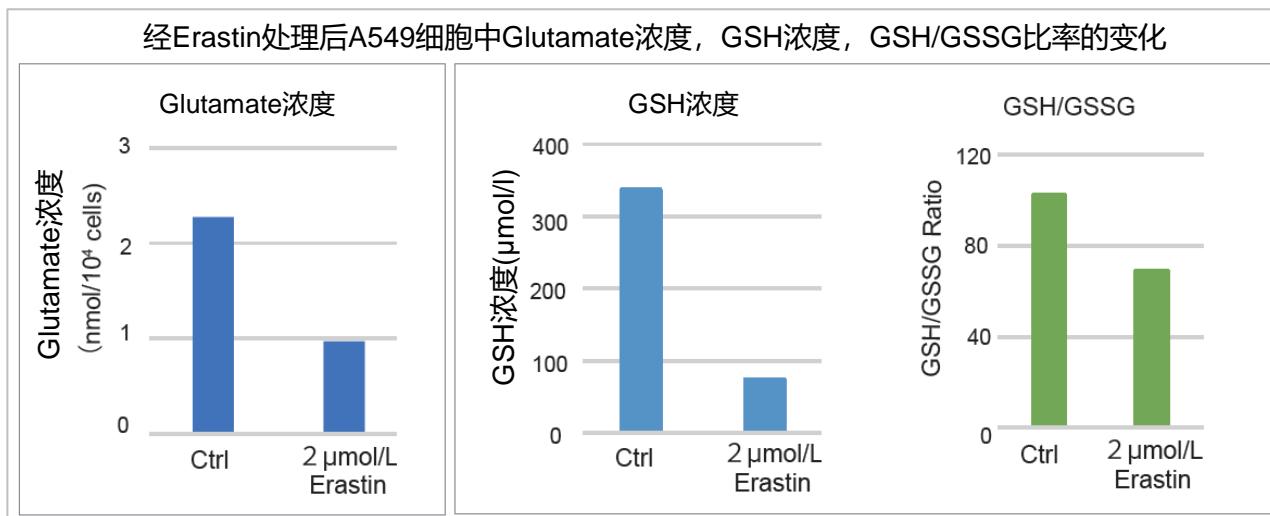
Fluorescence	Product	Liperfluo	MitoPeDPP	Mito-FerroGreen	FerroOrange
	Wavelength	524 nm/ 535 nm	452 nm/ 470 nm	505 nm/ 580 nm	543 nm/ 580 nm
	Indicator	Lipophilic peroxide	Lipophilic peroxide	Iron ion (Fe ²⁺)	Iron ion (Fe ²⁺)
	Localization	Intracellular	Mitochondria	Mitochondria	Intracellular
	Instrument	Microscope / FCM	Microscope	Microscope	Microscope/ Plate Reader
	Sample	Live Cell	Live Cell	Live Cell	Live Cell

Colorimetric	Product	Iron Assay Kit	GSSG/GSH Quantification Kit	Glutamate Assay Kit-WST
	Wavelength	Ferene-S (593 nm)	DTNB (412 nm)	WST (450 nm)
	Indictor	Iron ion (Fe ²⁺ ,Fe ³⁺)	GSSG/ GSH	Glutamate
	Instrument	Plate Reader	Plate Reader	Plate Reader
	Sample	Tissue	Cell, Tissue, Plasma, Erythrocytes	Cell, Cell culture medium
	Limit of Detection	8 ~ 400 μmol/l	GSH/GSSG: 0.5-50 μmol/l GSSG: 0.5-25 μmol/l	5 μmol/l

NEXT

各试剂实验例

铁死亡相关产品——实验例



产品名	样品	铁死亡诱导剂/抑制剂	与铁死亡有关的指标变化	文献
Mito-FerroGreen	SFXN2-KO cells	Elastin SFXN2-KO	Mitochondrial iron ↑ Heme content ↓	1
FerroOrange	HT22 cells	Brazilian green propolis	ROS ↓	2
Mito-FerroGreen FerroOrange	EA.hy926 HUVEC	PM2.5	Intracellular iron ↑ Mitochondrial iron ↑ Lipid peroxidation ↑ ROS ↑	3
Mito-FerroGreen FerroOrange	MEF HeLa cells	Bafilomycin A1	Intracellular iron ↓ Mitochondrial iron ↓	4
Liperfluo	Pfa1 cells	Arachidonoyl Adrenoyl	Lipid peroxidation ↑ GSH ↓	5
Liperfluo	HBE cells	Aeruginosa	Lipid peroxidation ↑	6
GSSG/GSH Quantification Kit	RPE cells ARPE-19 cells	Ferrostatin-1 Deferoxamine t-BuOOH	Intracellular iron ↑ Lipid peroxidation ↑ GSH ↓	7
GSSG/GSH Quantification Kit	HK-2 cells	Cisplatin Cadmium Sorbitol Elastin	Phosphorylated Smad3 ↑	8

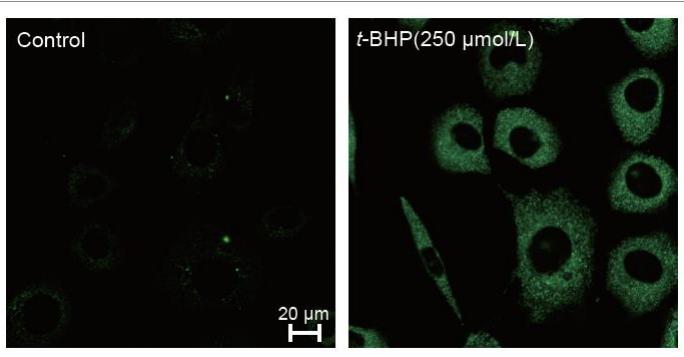
- Mon, E. et al., "Regulation of mitochondrial iron homeostasis by sideroflexin 2", *The Journal of Physiological Sciences*, **2019**, 69(2), 359–373.
- Takashima, M. et al., "Neuroprotective effects of Brazilian green propolis on oxytosis/ferroptosis in mouse hippocampal HT22 cells", *Food and Chemical Toxicology*, **2019**, 132, 110669.
- Wang, Y. et al., "PM2.5 induces ferroptosis in human endothelial cells through iron overload and redox imbalance", *Environmental Pollution*, 2019, 254(A), 112937.
- Yambire, K. et al., "Impaired lysosomal acidification triggers iron deficiency, necrotic cell death and inflammation in vivo", *bioRxiv*, **2019**, doi: <https://doi.org/10.1101/710798>.
- Kagan, V. et al., "Oxidized Arachidonic/Adrenic Phosphatidylethanolamines Navigate Cells to Ferroptosis", *Nat. Chem. Biol.*, **2017**, 13(1), 81.
- Dar, H. et al., "Pseudomonas aeruginosa utilizes host polyunsaturated phosphatidylethanolamines to trigger theft-ferroptosis in bronchial epithelium", *J Clin Invest.* **2018**, 128(10), 4639-4653.
- Totsuka, K. et al., "Oxidative stress induces ferroptotic cell death in retinal pigment epithelial cells", *Experimental Eye Research*, **2019**, 181, 316-324.
- Fujiki, K. et al., "Blockade of ALK4/5 signaling suppresses cadmium- and elastin-induced cell death in renal proximal tubular epithelial cells via distinct signaling mechanisms.", *Cell Death Differ.* **2019**, 26(11), 2371-2385.

NEXT

促销活动和价格

铁死亡相关产品——实验例

活细胞内的脂质过氧化物检测——[L248] Liperfluo



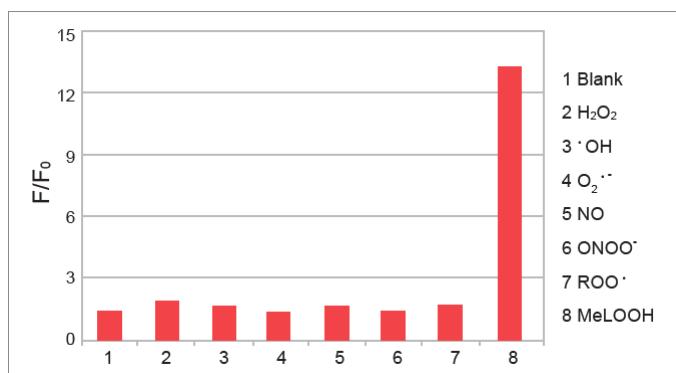
使用共聚焦显微镜观察L929细胞的细胞内脂质过氧化物的变化。实验的详细信息请参照我们公司的网站。

t-BHP: tert-butyl hydroperoxide

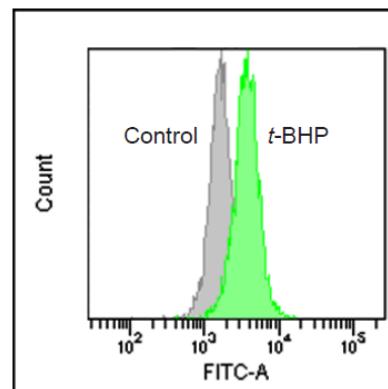
<数据提供>

日本北里大学药学部 今井浩孝老师, 熊谷刚老师

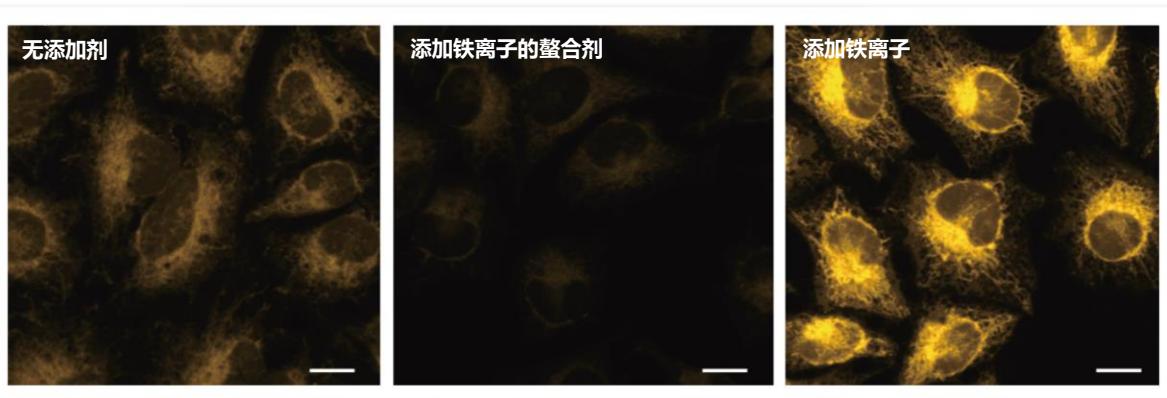
脂质过氧化物的高选择性



流式细胞仪



高灵敏度胞内铁离子检测——[F374] FerroOrange



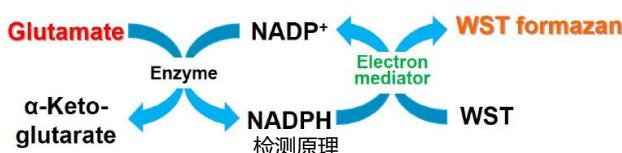
<检测条件>

Ex: 561 nm

Em: 570-620 nm

比例尺: 20 μm

[G269] Glutamate Assay Kit-WST



G263] GSSG/GSH Quantification Kit II

试剂盒含有掩蔽剂(Masking reagent)

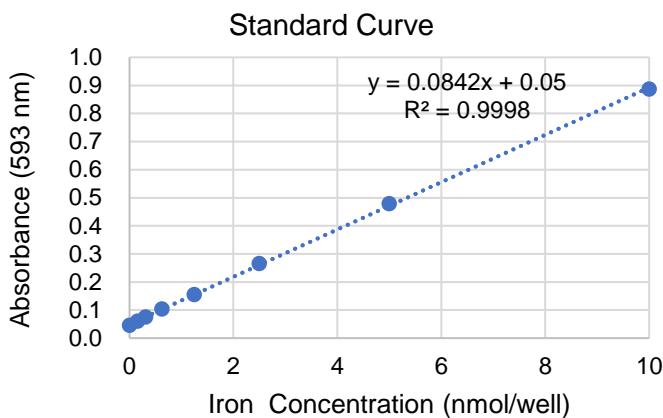
本试剂盒含有掩蔽剂(Masking reagent)与其他不含掩蔽剂的试剂盒相比可以得到更准确的检测结果。

铁死亡相关产品促销活动

比色法组织样品Fe²⁺/Fe³⁺检测试剂盒Iron Assay Kit 新品即将上市!

Iron Assay Kit 三大特点

- 经典比色法，操作简单快捷。
- 二价铁和三价铁均可检测。
- Excel模板自动计算铁浓度。



产品价格

产品名称(中文/英文)	货号	规格	市售价
脂质过氧化物检测 Liperfluo	L248	50 µg×5	2,470
细胞内亚铁离子检测 FerroOrange	F374	1 tube	1,510
		3 tubes	3,440
线粒体内亚铁离子检测 Mito-FerroGreen	M489	50 µg×2	2,670
总铁含量检测 Calcein-AM	C326	1 mg	2,480
线粒体内脂质过氧化物检测 MitoPeDPP	M466	5 µg×3	2,020
谷氨酰胺检测 Glutamine Assay Kit-WST	G268	100 tests	6,060
谷氨酸检测 Glutamate Assay Kit-WST	G269	100 tests	5,500
氧化/还原型谷胱甘肽检测 GSSG/GSH Quantification Kit	G263	100 tests	1,980
DNA损伤定量检测	DK02	20 samples	3,650
膜电位检测 JC-1	MT09	1 set	1,940
线粒体长效定位 MitoBright LT Green/Red/Deep Red	MT10-12	20 µl	640
自噬溶酶体检测 DAL Green	D675	20 nmol	2,980
自噬小体检测 DAP Green	D676	5 nmol	3,840
自噬小体检测 DAP Red	D677	5 nmol	3,870
线粒体自噬检测 Mitophagy	MD01	1 set	3,860