

Deferiprone (DFP)去铁酮 (铁螯合剂)

产品编号	产品名称	包装规格
NBS5883-100mg	Deferiprone (DFP)去铁酮 (铁螯合剂)	100mg
NBS5883-1g	Deferiprone (DFP)去铁酮 (铁螯合剂)	1g
NBS5883-5g	Deferiprone (DFP)去铁酮 (铁螯合剂)	5g

产品简介:

去铁酮 (Deferiprone, DFP) 是一种铁螯合剂, 按照 3: 1 比例 (配基: 铁离子) 与铁结合, 具抗氧化剂和神经保护作用。DFP (100 μ M) 逆转 HT-1080 纤维肉瘤细胞内爱拉斯汀诱导的铁死亡, 另外, DFP 能降低原代大鼠肝细胞的胞内铁水平以及脂质过氧化, 作用浓度分别是 200 μ M 和 50 μ M。DFP (50mg/kg) 能够减低兔海马内胆固醇饮食诱导的 A β 42 和 A β 40 增加, 以及 tau 和 GSK-3 β 磷酸化。

产品特性:

- 1) 化学名: 3-hydroxy-1,2-dimethyl-4(1H)-pyridinone
- 2) 同义名: CGP 37391、DN 18001AF
- 3) CAS NO: 30652-11-0
- 4) 分子式: C₇H₉NO₂
- 5) 分子量: 139.15
- 6) 外观: 白色至类白色固体
- 7) 纯度: $\geq 98\%$
- 8) 溶解性: 溶于甲醇 (5mg/ml)、H₂O (≥ 3 mg/ml, 需要超声或加热助溶)

保存条件:

-20°C避光干燥保存, 至少 2 年有效。

本产品仅用于生命科学研究, 不得用于医学诊断及其他用途!

储存液制备：

溶剂体积 浓度	质量	1mg	5mg	10mg
1mM		7.1865 mL	35.9324 mL	71.8649 mL
5mM		1.4373 mL	7.1865 mL	14.3730 mL
10mM		0.7186 mL	3.5932 mL	7.1865 mL

【温馨提示】：请根据产品在不同溶剂中的溶解度选择合适的溶剂配制储备液；一旦配成溶液，请分装保存，避免反复冻融造成的产品失效。储备液置于-80℃保存，约6个月有效；-20℃保存，约1个月有效。溶液储存的过程中避免强光直射。

产品使用： 【源自文献，仅作参考】

文献 1, Liu, R.-Z.; Zhang, S.; Zhang, W.; Zhao, X.-Y.; Du, G.-H. Baicalein Attenuates Brain Iron Accumulation through Protecting Aconitase 1 from Oxidative Stress in Rotenone-Induced Parkinson' s Disease in Rats. Antioxidants 2023, 12, 12.

<https://doi.org/10.3390/antiox12010012>

体内研究 (动物模型)：

动物模型 (Animal Model)： Male SD rats

实验方法 (Assay)： The rats were randomly divided into 5 groups: the control group, model group, BAI-300 group, BAI-150 group, and DFP-150 group. All of the groups received an intraperitoneal injection of 2.5 mg/kg rotenone q.d. for 6 weeks, except for the control group, which received an equal volume of vehicle. From the third week to the sixth week, the rats were administered 300 mg/kg of baicalein (BAI-300 group), 150 mg/kg baicalein (BAI-150 group), or 150 mg/kg of deferiprone (DFP-150 group) q.d. by gavage, while the control group and the model group received an equal volume of vehicle. The dose of baicalein was determined based on a previous study; the dose of deferiprone was based on its clinical trial (30 mg/kg/d) and preclinical studies.

文献 2, Fiorillo, M.; Tóth, F.; Brindisi, M.; Sotgia, F.; Lisanti, M.P. Deferiprone (DFP) Targets Cancer Stem Cell (CSC) Propagation by Inhibiting Mitochondrial Metabolism and Inducing ROS Production. Cells 2020, 9, 1529.

<https://doi.org/10.3390/cells9061529>

体外研究 (细胞水平):

细胞类型 (Cell Type): MCF7 cells

实验方法 (Assay): To evaluate the mitochondrial superoxide production, a MitoSOX probe was used. The MCF7 cells were treated with DFP (1 μ M to 1000 μ M) for 24 to 120 h. The vehicle alone (DMSO) control cells were processed in parallel. After 48 h, the cells were washed with PBS and incubated with MitoSOX (diluted in PBS/CM to a final concentration of 5 μ M) for 10 min at 37 °C

注意事项:

1. 针对溶解性比较差的化合物, 可通过 37°C 孵育以及超声的方式来促进其溶解。
2. 本品并非商业化的临床药物, 仅用作科研用途, 不得用作临床诊断或治疗, 不得用于食品或药品, 绝对禁止用在人身上。
3. 为了您的安全和健康, 请穿实验服并戴一次性手套操作。

本产品仅用于生命科学研究, 不得用于医学诊断及其他用途!

相关产品：

产品编号	产品名称	包装规格
<u>NBS5878-5g</u>	<u>Ferrostatin-1 铁死亡抑制剂</u>	5g
<u>NBS5879-1mg</u>	<u>Erastin 爱拉斯汀 (铁死亡激活剂)</u>	1mg
<u>NBS5880-10mg</u>	<u>(1S,3R)-RSL3 (GPx4 inhibitor)谷胱甘肽过氧化物酶 4 抑制剂</u>	10mg
<u>NBS5881-1mg</u>	<u>BCP-T.A. (Ferroptosis inducer)铁死亡诱导剂</u>	1mg
<u>NBS5882-2mg</u>	<u>Liproxstatin-1 铁死亡抑制剂</u>	2mg
<u>NBS5883-1g</u>	<u>Deferiprone (DFP)去铁酮 (铁螯合剂)</u>	1g
<u>NBS5884-25mg</u>	<u>Deferoxamine Mesylate 甲磺酸去铁胺 (铁螯合剂)</u>	25mg
<u>NBS5885-1g</u>	<u>FINO2(Ferroptosis inducer)铁死亡诱导剂</u>	1g
<u>NBS5886-50ug</u>	<u>FeRhoNox-1 (Fe²⁺ indicator) 亚铁离子荧光探针</u>	50ug
<u>NBS5887-24ug</u>	<u>FerroOrange (Fe²⁺ indicator) 亚铁离子荧光探针</u>	24ug
<u>NBS5888-50nmol</u>	<u>FerroFarRed (Fe²⁺ indicator) 亚铁离子荧光探针</u>	50nmol