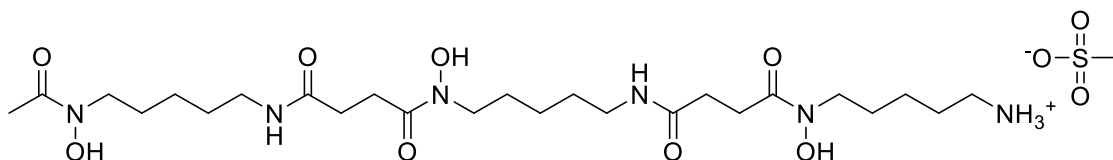


Deferoxamine mesylate

Code No.: **BIA-D2588**

Pack sizes: **25 mg, 100 mg**



Synonyms : Ba 33112, DFOM, DFX mesylate, Desferal, Desferal mesylate, Desferrioxamine B mesylate, NSC 644468

Specifications

CAS #	: 138-14-7
Molecular Formula	: C ₂₅ H ₄₈ N ₆ O ₈ .CH ₃ SO ₃ H
Molecular Weight	: 656.79
Source	: Semi-synthetic
Appearance	: White solid
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in methanol or DMSO

Application Notes

Deferoxamine (DFO) is a siderophore isolated from *Streptomyces pilosus*. The mesylate salt of DFO is used clinically to treat conditions of iron overload. DFO has antibacterial, cytoprotective and antioxidant activity. DFO promotes revascularization via the activation of vascular endothelial cell function by an Akt-eNOS-dependent mechanism. DFO decreases beta-amyloid deposition and induces autophagy.

References

1. The antibacterial activity of a siderophore. 3. The activity of deferoxamine in vitro and its influence on the effect of antibiotics against *Escherichia coli*, *Proteus mirabilis* and coagulase-negative staphylococci. Hartzen S.H. et al. APMIS 1994, 102, 219.
2. Deferoxamine inhibits microglial activation, attenuates blood-brain barrier disruption, rescues dendritic damage, and improves spatial memory in a mouse model of microhemorrhages. He X-F. et al. J Neuroch. 2016, 138, 436.
3. Deferoxamine promotes angiogenesis via the activation of vascular endothelial cell function. Ikeda Y. et al. Atherosclerosis 2011, 215, 339.
4. Deferoxamine promotes recovery of traumatic spinal cord injury by inhibiting ferroptosis. Yao X. et al. Neural Regen Re.s 2019, 14, 532.