

Product Datasheet

SP-420

Catalog No. **BP-02466** · CAS **911714-45-9** · Form **free base** · Physical state **solid** · Color **Light yellow to khaki** · Version **1.0** · Revision **2026-09-10**

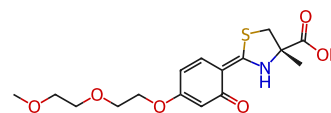
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Target Ferroptosis	Research area Metabolic Disease
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Molecular formula **C₁₆H₂₁NO₆S**

Molecular weight **355.4060**

STRUCTURE



DESCRIPTION

Petadeferitron (SP-420) is a tridentate iron chelator belonging to the class of iron chelators, with orally activity. Petadeferitron can be used in research related to β -thalassemia .

BIOLOGICAL ACTIVITY

In Vitro

Petadeferitron is a derivative of Desferrithiocin but has higher iron clearance efficiency compared to Desferrithiocin with an ICE (Iron Clearance Efficiency) value of 26.7.

In Vivo

Petadeferitron causes renal function abnormalities, including increased serum creatinine, proteinuria, increased urine protein/creatinine ratio, and glycosuria.

SOLUBILITY

Soluble in DMSO

REFERENCES

- [1].Bergeron RJ, et al. Substituent effects on desferrithiocin and desferrithiocin analogue iron-clearing and toxicity profiles. J Med Chem. 2012 Aug 23;55(16):7090-103.
- [2]. Basu S, et al. Understanding the intricacies of iron overload associated with β -thalassemia: a comprehensive review[J]. Thalassemia Reports, 2023, 13(3): 179-194.
- [3].Taher A T, et al. Safety and pharmacokinetics of the oral iron chelator SP-420 in β -thalassemia[J]. American Journal of Hematology, 2017, 92(12): 1356-1361.

Lot CoA and SDS are separate documents.