



SZABO SCANDIC

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Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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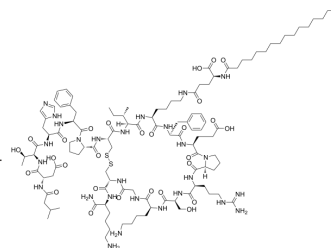
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Rusfertide

| | |
|-----------------------------|--|
| Cat. No.: | HY-P10272 |
| CAS No.: | 1628323-80-7 |
| Molecular Formula: | C ₁₁₄ H ₁₈₁ N ₂₇ O ₂₈ S ₂ |
| Molecular Weight: | 2441.95 |
| Sequence: | {Asp(N-(3-methyl-1-oxobutyl))}-Thr-His-Phe-Pro-Cys-Ile-[Lys(γGlu-C16 acid)]-Phe-Glu-Pro-Arg-Ser-Lys-Gly-Cys-Lys-NH ₂ (disulfide bridge: Cys6-Cys16) |
| Sequence Shortening: | {Asp(N-(3-methyl-1-oxobutyl))}-THFPCI-[Lys(γGlu-C16 acid)]-FEPRSKGCK-NH ₂ (disulfide bridge: Cys6-Cys16) |
| Target: | Ferroportin |
| Pathway: | Membrane Transporter/Ion Channel |
| Storage: | Sealed storage, away from moisture |
| | Powder -80°C 2 years |
| | -20°C 1 year |
| | * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture) |



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 100 mg/mL (40.95 mM)

* "≥" means soluble, but saturation unknown.

| | Solvent Concentration | Mass | | |
|------------------------------|--------------------------|-----------|-----------|-----------|
| | | 1 mg | 5 mg | 10 mg |
| Preparing Stock Solutions | 1 mM | 0.4095 mL | 2.0475 mL | 4.0951 mL |
| | 5 mM | 0.0819 mL | 0.4095 mL | 0.8190 mL |
| | 10 mM | 0.0410 mL | 0.2048 mL | 0.4095 mL |

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Rusfertide is a peptide mimetic of natural hepcidin, which targets and degrades ferroportin, reduces serum iron and transferrin-saturation, and thus regulates the production of red blood cells. Rusfertide ameliorates the polycythemia vera, β-thalassemia and hereditary hemochromatosis^{[1][2]}.

In Vivo

Rusfertide limits the iron toxicity in red blood cells (RBCs) (1 mg/kg, s.c., once every two days, for 49 days) and transferrin-saturation (2.5 mg/kg, s.c., once every two days, for 2 weeks), improves oxygen carrying capacity of RBCs, attenuates the anemia and iron deposition in mice models for β-thalassemia and hereditary hemochromatosis^[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

| | |
|-----------------|--|
| Animal Model: | Hbb ^{th3/+} mice model for β -thalassemia and hereditary hemochromatosis ^[1] |
| Dosage: | 1 and 2.5 mg/kg |
| Administration: | s.c., once every two days, for 49 days (1 mg/kg); or for 2 weeks (2.5 mg/kg) |
| Result: | Improved the survival rate of RBCs in β -thalassemia model. Reduced transferrin-saturation and iron deposition. |

REFERENCES

[1]. Taranath R, et al., Regulation of iron homeostasis by PTG-300 improves disease parameters in mouse models for beta-thalassemia and hereditary hemochromatosis[J]. Blood, 2019, 134: 3540.

[2]. Kremyanskaya M, et al., PTG-300 eliminates the need for therapeutic phlebotomy in both low and high-risk polycythemia vera patients[J]. Blood, 2020, 136: 33-35.

Caution: Product has not been fully validated for medical applications. For research use only.

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