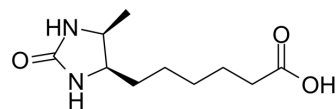


D-Desthiobiotin

| | | | |
|---------------------------|---|-------|----------|
| Cat. No.: | HY-128699 | | |
| CAS No.: | 533-48-2 | | |
| Molecular Formula: | C ₁₀ H ₁₈ N ₂ O ₃ | | |
| Molecular Weight: | 214.26 | | |
| Target: | Endogenous Metabolite | | |
| Pathway: | Metabolic Enzyme/Protease | | |
| Storage: | Powder | -20°C | 3 years |
| | | 4°C | 2 years |
| | In solvent | -80°C | 6 months |
| | | -20°C | 1 month |



SOLVENT & SOLUBILITY

In Vitro

DMSO : 62.5 mg/mL (291.70 mM; Need ultrasonic)
 H₂O : 1 mg/mL (4.67 mM; Need ultrasonic)

| Preparing Stock Solutions | Solvent Concentration | Mass | | |
|---------------------------|-----------------------|-----------|------------|------------|
| | | 1 mg | 5 mg | 10 mg |
| | 1 mM | 4.6672 mL | 23.3361 mL | 46.6723 mL |
| | 5 mM | 0.9334 mL | 4.6672 mL | 9.3345 mL |
| | 10 mM | 0.4667 mL | 2.3336 mL | 4.6672 mL |

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

In Vivo

- Add each solvent one by one: PBS
Solubility: 3.7 mg/mL (17.27 mM); Clear solution; Need ultrasonic and warming and heat to 60°C
- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 2.08 mg/mL (9.71 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.08 mg/mL (9.71 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.08 mg/mL (9.71 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

D-Desthiobiotin is a biotin derivative used in affinity chromatography and protein chromatography. D-Desthiobiotin also can be used for protein and cell labeling, detection and isolation^{[1][2]}.

IC₅₀ & Target

| | |
|----------------------|-----------------------------|
| Microbial Metabolite | Human Endogenous Metabolite |
|----------------------|-----------------------------|

REFERENCES

[1]. Ali Ansari, et al. Secondary anchor targeted cell release. Biotechnol Bioeng

[2]. Röhlen DL, et al. Toward a Hybrid Biosensor System for Analysis of Organic and Volatile Fatty Acids in Fermentation Processes. Front Chem. 2018 Jul 17;6:284.

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

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