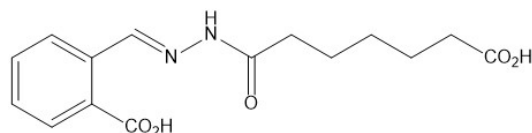


IDE1, Inducer of definitive endoderm

| Catalog | Unit |
|--------------|-------|
| TBI4159-5MG | 5 mg |
| TBI4159-25MG | 25 mg |

Product Details

Formal Name: (E/Z)-1-[2-[(2-Carboxyphenyl)methylene]hydrazide]heptanoic acid
Alternate Names: 2-[(E/Z)-(6-Carboxyhexanoylhydrazinylidene)methyl]benzoic acid
Molecular Formula: C₁₅H₁₈N₂O₅
Formula Weight: 306.3
CAS Number: 1160927-48-9
Purity: >98%
Formulation: Powder
Solubility: Soluble in DMSO (up to 25 mg/ml)
Storage: -20°C
Stability: ≥ 2 years.



Applications

Inducer of definitive endoderm

Functions

IDE1 induces robust differentiation of embryonic stem cells into endoderm (EC₅₀ = 125 nM) in both mouse and human cells via activation of the TGFβ signaling pathway. It has been used in a simplified method to generate human microglia from pluripotent stem cells. IDE1 was also able to generate nephrogenic intermediate mesoderm cells from human pluripotent stem cells that had less toxicity and higher efficiency than cells generated with activin A. It was part of a step-wise all small molecule cocktail that was able to generate functional hepatic cells from human pluripotent stem cells.

Application Procedures

First dissolved in DMSO (25 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 3 months.

For research use only.