

Divin, Divisome assembly inhibitor

Catalog	Unit
TBI4105-5MG	5 mg
TBI4105-25MG	25 mg

Product Details

Formal Name: N'-[(E)-(2-Hydroxynaphthalen-1-yl)methylidene]-3-(2-methyl-1H-benzimidazol-1-yl)propanehydrazide

Molecular Formula: C₂₂H₂₀N₄O₂

Formula Weight: 372.42

CAS Number: 1443321-11-6

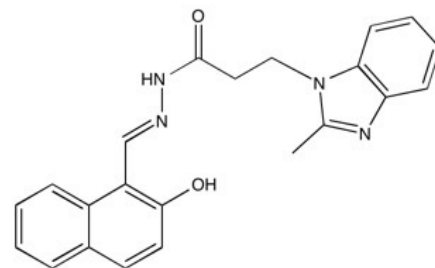
Purity: >98%

Formulation: powder

Solubility: Soluble in DMSO (up to at least 25 mg/ml)

Storage: -20°C

Stability: ≥ 1 year.



Applications

Divisome assembly inhibitor

Functions

Divin is an iron, cobalt, and copper chelator that arrests the late stages of cytokinesis in bacteria by blocking the physical process of constriction in dividing cells without affecting FtsZ. Iron starvation leads to transcriptional down-regulation of genes encoding proteins involved in cell division and affects the spatiotemporal localization of the divisome. Long-term treatment of bacteria with Divin resulted in cellular damage and prevented reactivation of the divisome even in the presence of iron-replete conditions. Iron deprivation is a potential adjuvant therapy for treating bacterial antibiotic resistance.

Application Procedures

First dissolved in DMSO (up to at least 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.