

LMK235, Potent, selective inhibitor of HDAC4/5

Catalog	Unit
TBI4024-5MG	5 mg
TBI4024-25MG	25 mg

Product Details

Formal Name: N-[6-(Hydroxyamino)-6-oxohexoxy]-3,5-dimethylbenzamide

Molecular Formula: C₁₅H₂₂N₂O₄

Formula Weight: 294.40

CAS Number: 1418033-25-6

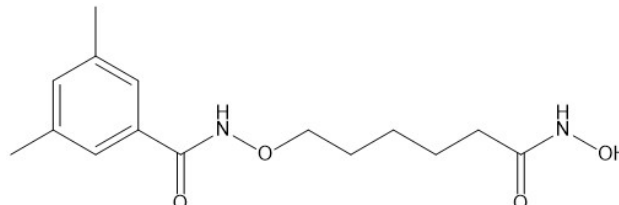
Purity: >98%

Formulation: powder

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

Storage: -20°C

Stability: ≥ 2 years.



Applications

Potent, selective inhibitor of HDAC4/5

Functions

Potent and selective inhibitor of HDAC4 (IC₅₀ = 11.9 nM) and HDAC5 (IC₅₀ = 4.2 nM). Cytotoxic against human ovarian cancer cell lines A2780 and A2780 CisR (IC₅₀'s = 0.49 μM and 0.32 μM respectively). It displayed synergistic effects with cisplatin and restored sensitivity in platinum-resistant cell lines. LMK235 induced apoptosis in pancreatic neuroendocrine tumor cell lines BON-1 and QGP-1 and in multiple myeloma cells. It also induced autophagy and cell death via SCNN1A downregulation in glioblastoma cells. LMK235 reduced hypertension in mouse and rat models via inhibition of vascular constriction and vessel hypertrophy. LMK235 significantly increased neurite outgrowth via increased BMP-Smad-dependent transcription in SH-SY5Y cells and exerted neuroprotective effects against neurodegeneration induced by MPP⁺ suggesting possible therapeutic potential in treating Parkinson's disease.

Application Procedures

First dissolved in DMSO (up to 25 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 2 months.

For research use only.