

PF-543 HCl, Sphingosine kinase-1 inhibitor

Catalog	Unit
TBI4998-5MG	5 mg
TBI4998-25MG	25 mg

Product Details

Formal Name: [(2R)-1-[[4-[[3-(Benzenesulfonylmethyl)-5-methylphenoxy]methyl]phenyl]methyl]pyrrolidin-2-yl]methanol hydrochloride

Molecular Formula: C₂₇H₃₁NO₄S·HCl

Formula Weight: 502.10

CAS Number: 1706522-79-3

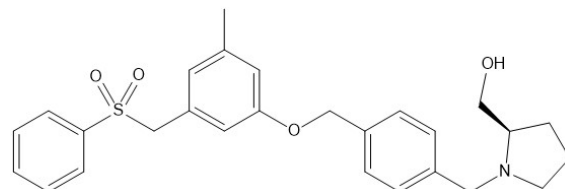
Purity: >98%

Formulation: powder

Solubility: Soluble in DMSO (50 mg/ml); or Water (5 mg/mL with warming)

Storage: -20°C

Stability: ≥ 2 years.



Applications

Sphingosine kinase-1 inhibitor

Functions

Potent (IC₅₀ = 2.0 nM) and selective (>100-fold over SphK2) reversible inhibitor of sphingosine kinase-1 (SphK1). It induced autophagy in head and neck squamous cell carcinoma cells. PF-543 mitigated pulmonary fibrosis via reducing lung epithelial cell mitochondrial DNA damage and monocyte recruitment. It also alleviated sepsis-induced lung injury in an acute ethanol intoxication model in mice. PF-543 inhibited cell cycle and tumor growth in a xenograft model of non-small cell lung cancer.

Application Procedures

First dissolved in DMSO (50 mg/ml); or Water (5 mg/mL with warming), then diluted to aqueous buffer. Solutions in DMSO or water may be stored at -20°C for up to 3 months.

For research use only.