

BI-D1870, p90 Ribosomal S6 kinase inhibitor

Catalog	Unit
TBI4791-5MG	5 mg
TBI4791-25MG	25 mg

Product Details

Formal Name: 2-(3,5-Difluoro-4-hydroxyanilino)-5,7-dimethyl-8-(3-methylbutyl)-7H-pteridin-6-one

Molecular Formula: C₁₉H₂₃F₂N₅O₂

Formula Weight: 391.42

CAS Number: 501437-28-1

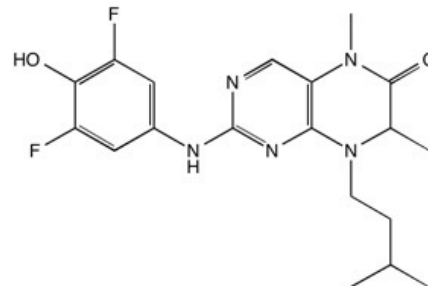
Purity: >98%

Formulation: powder

Solubility: Soluble in DMSO (up to 15 mg/ml)

Storage: -20°C

Stability: ≥ 1 year.



Applications

p90 Ribosomal S6 kinase inhibitor

Functions

BI-D1870 is an inhibitor of p90 ribosomal S6 kinase (RSK; IC₅₀'s = RSK1, 31 nM; RSK2, 24 nM; RSK3, 18 nM; RSK4, 15 nM) with selectivity over other AGC kinases. It protected mice from experimental autoimmune encephalomyelitis suggesting a new strategy to treat multiple sclerosis. BI-D1870 has also been found to alter mTORC1 signaling in an RSK-independent manner. BI-D1870 induced apoptosis in oral squamous cell carcinoma cells, suppressed growth and induced apoptosis in pediatric medulloblastoma cell lines as well as sensitizing these lines to Sonic hedgehog agents, and blocked cell proliferation and protein synthesis in dual BRAF and MEK inhibitor-resistant melanoma.

Application Procedures

First dissolved in DMSO (up to 15 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 1 month.

For research use only.