



Data Sheet

Research Use Only

Compound Name

BI-D1870

Catalog Number

SM10

Activity

BI-D1870 is a specific inhibitor of the p90 RSK (ribosomal S6 kinase) isoforms, which inhibits RSK1, RSK2, RSK3 and RSK4 *in vitro*. BI-D1870 does not significantly inhibit ten other AGC kinase members and over 40 other protein kinases tested at 100-fold higher concentrations. BI-D1870 does not affect the agonist-triggered phosphorylation of substrates for six other AGC kinases. Additionally, BI-D1870 does not suppress the phorbol ester- or EGF-induced phosphorylation of CREB (cAMP-response-element-binding protein).

Purity

>97%

Formula

 $C_{19}H_{23}F_2N_5O_2$

Solubility

DMSO

Alternative Names

2-[(3,5-Difluoro-4-hydroxyphenyl)amino]-7,8-dihydro-5,7-dimethyl-8-(3-methylbutyl)-6(5H)-pteridone

Effect

BI-D1870 induces apoptosis, although preferentially, in a p21-deficient background. BI-D1870 also induces a strong transcription- and p53-independent accumulation of p21 protein and protects cells from gamma irradiation (γ IR)-induced apoptosis, driving them into senescence even in the absence of γ IR.

CAS

501437-28-1

Molecular Weight

391.42

Stability

Stable at -20°C. Keep away from direct sunlight.

References

1. Neise, D., et al. 2013. Cell Death and Disease. 4: e859. PMID: 24136223