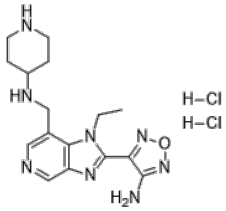
ProbeChem®
Expedite Your Scientific Research

Data Sheet

WWW.PROBECHEM.COM

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	SB-747651A dihydrochloride
Cat. No.	:	PC-28692
CAS No.	:	1781882-72-1
Molecular Formula	:	$C_{16}H_{24}Cl_2N_8O$
Molecular Weight	:	415.32
Target	:	p38 MAPK
Solubility	:	10 mM in DMSO



Biological Activity

SB-747651A dihydrochloride (SB747651A) is a potent, specific and ATP-competitive inhibitor of MSK1 (mitogen- and stress-activated kinase 1) with IC50 of 11 nM.
SB-747651A inhibits four other kinases, PRK2 (double-stranded-RNA-dependent protein kinase 2), RSK1 (ribosomal S6 kinase 1), p70S6K (S6K is S6 kinase) (p70RSK) and ROCK-II (Rho-associated protein kinase 2), with a similar potency to MSK1 against a panel of 117 protein kinases.
SB-747651A fully inhibits MSK1/2 activity at 5-10 μM in cells.
SB-747651A inhibits the production of the anti-inflammatory cytokine IL-10 in wild-type, but not MSK1/2-knockout, macrophages following LPS (lipopolysaccharide) stimulation.
SB-747651A reduced cell proliferation, spheroid formation, migration and chemoresistance in patient-derived glioblastoma spheroid cultures and a murine orthotopic xenograft model.

References

Naqvi S, et al. Biochem J. 2012 Jan 1;441(1):347-57.

Knudsen AM, et al. Sci Rep. 2021 Mar 16;11(1):6066.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

E-mail: tech@probechem.com