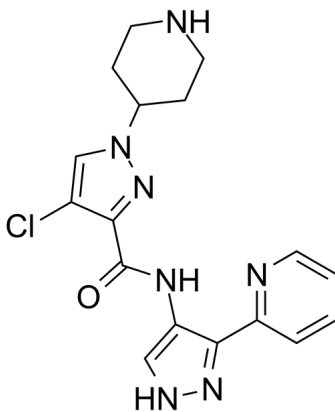


Certificate of Analysis

Catalog Number	BP13047
Product Name	BDP5290

Physical and Chemical Properties

CAS No.	1817698-21-7
Chemical Formula	C ₁₇ H ₁₈ ClN ₇ O
Molecular Weight	371.83
Solubility	DMSO: 12.5 mg/mL (33.62 mM)
Storage	Powder: -20°C for 2 years In solvent: -80°C for 1 year
Chemical Structure OR Tested Image	

Product Information

Description	BDP5290 is a potent inhibitor of both ROCK and MRCK (IC ₅₀ s of 5 nM, 50 nM, 10 nM and 100 nM for ROCK1, ROCK2, MRCK α and MRCK β , respectively.)
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Targets&IC50	ROCK1:5 nM , ROCK2:50 nM , MRCK β :100 nM, MRCK α :10 nM
In vitro	BDP5290 as a potent MRCK inhibitor.?X-ray crystallography of the MRCK β kinase domain in complex with BDP5290 revealed how this ligand interacts with the nucleotide binding pocket.?BDP5290 demonstrated marked selectivity for MRCK β over ROCK1 or ROCK2 for inhibition of myosin II light chain (MLC) phosphorylation in cells.?While BDP5290 was able to block MLC phosphorylation at both cytoplasmic actin stress fibres and peripheral cortical actin bundles, the ROCK selective inhibitor Y27632 primarily reduced MLC phosphorylation on stress fibres.?BDP5290 was also more effective at reducing MDA-MB-231 breast cancer cell invasion through Matrigel than Y27632.

Analytical Data

HPLC	Shows Min >99% purity
H-NMR	Consistent with structure
Stability and Solubility Advice	Information on product stability, especially in solution, has rarely been reported and in most cases we can only provide a general guideline. We recommend that once the stock solution has been prepared, it be stored in equal quantities in sealed vials and used within 1 month. Avoid repeated freezing and thawing cycles. Storage conditions for some special products should be referred to their storage details.

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