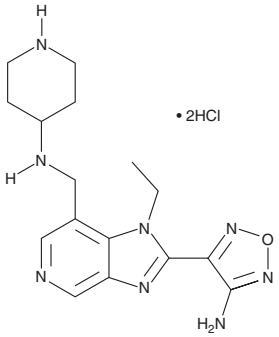
PRODUCT INFORMATION

SB-747651A (hydrochloride)

Item No. 46111



CAS Registry No.:	1781882-72-1
Formal Name:	2-(4-amino-1,2,5-oxadiazol-3-yl)-1-ethyl-N-4-piperidinyl-1H-imidazo[4,5-c]pyridine-7-methanamine, dihydrochloride
MF:	$C_{16}H_{22}N_8O \bullet 2HCl$
FW:	415.3
Purity:	≥98%
Supplied as:	A solid
Storage:	-20°C
Stability:	≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

SB-747651A (hydrochloride) is supplied as a solid. Aqueous solutions of SB-747651A (hydrochloride) can be prepared by directly dissolving the solid in aqueous buffers. SB-747651A (hydrochloride) is soluble (≥10 mg/ml) in PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day.

Description

SB-747651A is an inhibitor of p90 ribosomal S6 kinase 1 (MSK1; IC_{50} = 0.5 nM).[1] It is selective for MSK1 over Rho-associated kinase 1 (ROCK1), p70 ribosomal S6 kinase (p70S6K), dual-specificity tyrosine phosphorylation-regulated kinase 1A (DYRK1A), and cyclin-dependent kinase 2 (Cdk2; IC_{50}s = 100, 270, 4,900, and >10,000 nM, respectively) and is greater than 300-fold selective over glycogen synthase kinase 3 (GSK3) and p90 ribosomal S6 kinase 1 (RSK1). SB-747651A (2 mg/kg, i.p.) reduces tumor volume and metastasis in a PANC-1 pancreatic cancer mouse xenograft model and reduces tumor volume in a patient-derived xenograft (PDX) mouse model of pancreatic cancer.[2]

References

1. Bamford, M.J., Bailey, N., Davies, S., *et al.* (1H-imidazo[4,5-c]pyridin-2-yl)-1,2,5-oxadiazol-3-ylamine derivatives: Further optimisation as highly potent and selective MSK-1-inhibitors. *Bioorg. Med. Chem. Lett.* **15(14),** 3407-3411 (2005).
2. Malvi, P., Chava, S., Cai, G., *et al.* HOXC6 drives a therapeutically targetable pancreatic cancer growth and metastasis pathway by regulating MSK1 and PPP2R2B. *Cell Rep. Med.* **4(11),** 101285 (2023).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent *via* email to your institution.

WARRANTY AND LIMITATION OF REMEDY
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