

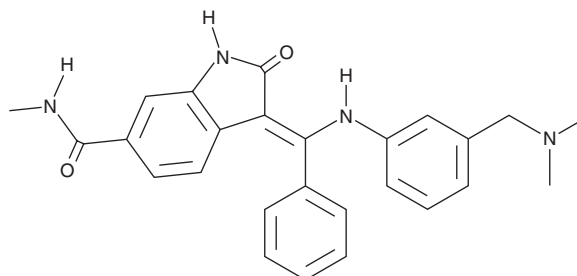
PRODUCT INFORMATION



MEK Inhibitor

Item No. 43190

CAS Registry No.: 334951-92-7
Formal Name: (3Z)-3-[[[3-[(dimethylamino)methyl]phenyl]amino]phenylmethylene]-2,3-dihydro-N-methyl-2-oxo-1H-indole-6-carboxamide
Synonym: BIX02189
MF: C₂₆H₂₆N₄O₂
FW: 426.5
Purity: ≥95%
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

MEK inhibitor is supplied as a solid. A stock solution may be made by dissolving the MEK inhibitor in the solvent of choice, which should be purged with an inert gas. MEK inhibitor is soluble (≥10 mg/ml) in DMSO and slightly soluble (0.1-1 mg/ml) in ethanol.

Description

MEK inhibitor is an inhibitor of MEK5 (IC₅₀ = 1.5 nM).¹ It is selective for MEK5 over ERK5, activin receptor-like kinase 5 (ALK5), also known as TGF-β receptor type I (TGF-βRI), MEK1, and MEK2 (IC₅₀s = 59, 580, >6,300, and >6,300 nM, respectively) and a panel of 79 other kinases at 10 μM. MEK inhibitor (1, 3, or 10 μM) decreases the levels of phosphorylated ERK5 in sorbitol-stimulated HeLa cells. It inhibits TGF-β1-induced increases in N-cadherin levels, decreases in E-cadherin levels, and cell migration in a scratch assay in A549 lung cancer cells when used at a concentration of 10 μM.² MEK inhibitor (20 mg/kg per day) decreases the number of lung nodules in an A549 mouse model of lung metastasis.

References

1. Tataka, R.J., O'Neill, M.M., Kennedy, C.A., *et al.* Identification of pharmacological inhibitors of the MEK5/ERK5 pathway. *Biochem. Biophys. Res. Commun.* **377**(1), 120-125 (2008).
2. Park, S.J., Choi, Y.S., Lee, S., *et al.* BIX02189 inhibits TGF-β1-induced lung cancer cell metastasis by directly targeting TGF-β type I receptor. *Cancer Lett.* **381**(2), 314-322 (2016).

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.

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