



LKT Laboratories, Inc.

SB-431542

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Product Information

Product ID S0400

CAS No. 301836-41-9

Chemical Name

Synonym

Formula $C_{22}H_{16}N_4O_3$

Formula Wt. 384.39

Melting Point 244.8°C

Purity ≥98%

Solubility DMSO 76 mg/mL (197.71 mM)

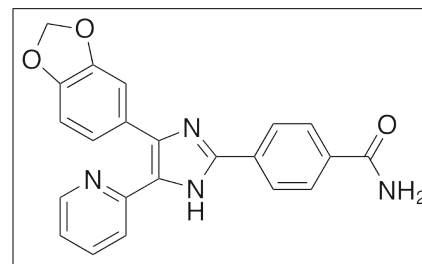
Ethanol 3 mg/mL (7.8 mM)

Water Insoluble

Store Temp Ambient

Ship Temp Ambient

Description SB-431542 inhibits activin receptor-like kinases ALK4, ALK5, and ALK7; this inhibition leads to inhibition of activin and TGF- β signaling with no downstream effects on ERK, JNK, or MAPK. SB-431542 exhibits anti-angiogenic and anticancer activity. In vitro, SB-431542 inhibits proliferation and motility of glioma cells. This compound also induces maturation of dendritic cells through its inhibition of TGF- β , increasing IL-12 production and increasing cytotoxic activity of immune cells in vitro.



Pricing and Availability

Bulk quantities available upon request

Product ID	Size	List Price
S0400	1 mg	\$52.50
S0400	5 mg	\$180.00
S0400	25 mg	\$479.40

References Tanaka H, Shinto O, Yashiro M, et al. Transforming growth factor β signaling inhibitor, SB-431542, induces maturation of dendritic cells and enhances anti-tumor activity. *Oncol Rep.* 2010 Dec;24(6):1637-43. PMID: 21042762.

Halder SK, Beauchamp RD, Datta PK. A specific inhibitor of TGF- β receptor kinase, SB-431542, as a potent antitumor agent for human cancers. *Neoplasia.* 2005 May;7(5):509-21. PMID: 15967103.

Hjelmeland MD, Hjelmeland AB, Sathornsumetee S, et al. SB-431542, a small molecule transforming growth factor- β -receptor antagonist, inhibits human glioma cell line proliferation and motility. *Mol Cancer Ther.* 2004 Jun;3(6):737-45. PMID: 15210860.

Inman GJ, Nicolás FJ, Callahan JF, et al. SB-431542 is a potent and specific inhibitor of transforming growth factor- β superfamily type I activin receptor-like kinase (ALK) receptors ALK4, ALK5, and ALK7. *Mol Pharmacol.* 2002 Jul;62(1):65-74. PMID: 12065756.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.