

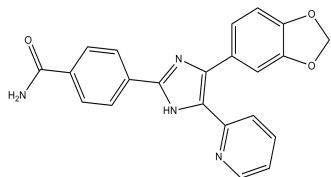
SB-431542

ALTERNATE NAME: 4-[4-(1,3-benzodioxol-5-yl)-5-pyridin-2-yl-1H-imidazol-2-yl]benzamide

CATALOG #: 1674-1, 5

AMOUNT: 1 mg, 5 mg

STRUCTURE:



MOLECULAR FORMULA: C₂₂H₁₈N₄O₃

MOLECULAR WEIGHT: 384.39

CAS NUMBER: 301836-41-9

APPEARANCE: Crystalline solid

SOLUBILITY: DMSO (20 mg/ml) or Ethanol (2 mg/ml)

PURITY: >98% by HPLC

STORAGE: Store at -20°C. Protect from air and light

DESCRIPTION: A potent and selective inhibitor of the TGF-β 1 receptor ALK5 (IC₅₀ = 94 nM). It inhibits ALK4 only at higher concentrations (IC₅₀ = 140 nM). Suppresses renewal in embryonic and induced pluripotent stem (iPS) cells and promotes their differentiation through its effect on Smad signaling pathway.

REFERENCES:

1. Chambers, S.M., *et al.* (2009). *Nat. Biotech.* **27**, 275.
2. James, D., *et al.* (2005). *Development* **132**, 1273.
3. Inman, G.J., *et al.* (2002). *Mol. Pharmacol.* **62**, 65.

HANDLING: Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

FOR RESEARCH USE ONLY! Not to be used in humans.

RELATED PRODUCTS:

A 83-01 (Cat. No. 1725-1)
 ABT-869 (Cat. No. 1615-1,5)
 Axitinib (Cat. No. 1581-5, 25)
 BIBW2992 (Cat. No. 1616-1,5)
 BMS-599626 (Cat. No. 1614-1,5)
 Bosutinib (Cat. No. 1584-5, 25)
 Canertinib (Cat. No. 1617-5)
 Carbozantinib (Cat. No. 1935-5, 25)
 Cediranib (Cat. No. 1613-1,5)
 CP-690550 (Cat. No. 1622-5,25)
 Crizotinib (Cat. No. 1934-5, 25)
 Dasatinib (Cat. No. 1586-25, 100)
 Emodin (Cat. No. 1875-25, 100)
 Enzastaurin (LY317615)(Cat. No. 1619-1,5)
 Erlotinib, Hydrochloride Salt (Cat. No. 1588-100,1000)
 EZSolution™ Staurosporine (Cat. No. 1745-01)
 Gefitinib (Cat. No. 1589-5,25)
 Genistein (Cat. No. 1533-10, 100)
 Go 6976 (Cat. No. 1711-500)
 Imatinib Mesylate (Cat. No. 1625-100, 1000)
 Lapatinib Ditosylate (Cat. No. 1624-25,100)
 Motesanib (Cat. No. 2023-5, 25)
 Nilotinib (Cat. No. 1750-25, 100)
 PD 153035, Hydrochloride (Cat. No. 1656-2)
 PD173074 (Cat. No. 1675-1)
 Saracatinib (Cat. No. 1582-5, 25)
 SB-431542 (Cat. No. 1674-1)
 Sorafenib (Cat. No. 1594-5, 25)
 Staurosporine (Cat. No. 1048-01,1)
 Tamoxifen Citrate (Cat. No. 1551-1000)
 SU 1498 (Cat. No. 1836-1,5)
 SU-5402 (Cat. No. 1645-05)
 SU 6668 (Cat. No. 1931-5, 25)
 SU 11274 (Cat. No. 1938-5, 25)
 Sunitinib Malate (Cat. No. 1611-100, 1000)
 Tandutinib (Cat. No. 2024-5, 25)
 Tyrphostin AG 1295 (Cat. No. 1571-5)
 Tyrphostin AG 490 (Cat. No. 1570-5)
 Vandetanib (Cat. No. 1751-25, 100)
 Vatalanib DiHCl Free Base (Cat. No. 2025-5, 25)