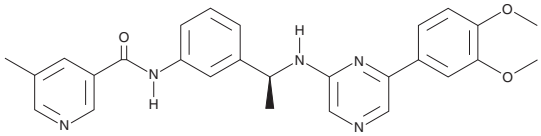
PRODUCT INFORMATION

Seralutinib

Item No. 37754

CAS Registry No.:	1619931-27-9
Formal Name:	N-[3-[(1S)-1-[[6-(3,4-dimethoxyphenyl)-2-pyrazinyl]amino]ethyl]phenyl]-5-methyl-3-pyridinecarboxamide
Synonyms:	GB002, PK 10571
MF:	$C_{27}H_{27}N_5O_3$
FW:	469.5
Purity:	≥98%
UV/Vis.:	λ_{max}: 273 nm
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

Seralutinib is supplied as a solid. A stock solution may be made by dissolving the seralutinib in the solvent of choice, which should be purged with an inert gas. Seralutinib is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of seralutinib in DMSO is approximately 25 mg/ml and approximately 10 mg/ml in ethanol and DMF.

Description

Seralutinib is an inhibitor of PDGFR, c-Kit, and colony stimulating factor 1 receptor (CSF1R).[1] It inhibits PDGF-BB-induced phosphorylation of ERK in PDGFRα-dependent H1703 human lung epithelial cells, human pulmonary arterial smooth muscle cells (HPASMCs), which express PDGFRα and PDGFRβ, and human lung fibroblasts (HLFs), which express higher levels of PDGFRβ than PDGFRα (IC_{50}s = 74, 49, and 62 nM, respectively). Seralutinib also inhibits stem cell factor-induced c-Kit autophosphorylation in human pulmonary endothelial cells (HPAECs) and M-CSF-induced CSF1R phosphorylation in human primary differentiated macrophages (IC_{50}s = 7.8 and 14.4 nM, respectively). It inhibits the proliferation of H1703 cells and PDGF-BB-induced HPASMCs and HLFs (IC_{50}s = 32, 33, and 29 nM, respectively). Seralutinib (2.5 mg/kg) prevents increases in pulmonary artery systolic pressure in a rat model of pulmonary arterial hypertension induced by monocrotaline (Item No. 16666) pneumonectomy when administered *via* passive inhalation.

Reference

1. Galkin, A., Sitapara, R., Clemons, B., *et al.* Inhaled seralutinib exhibits potent efficacy in models of pulmonary arterial hypertension. *Eur. Respir. J.* **60(6)**, 2102356 (2022).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM