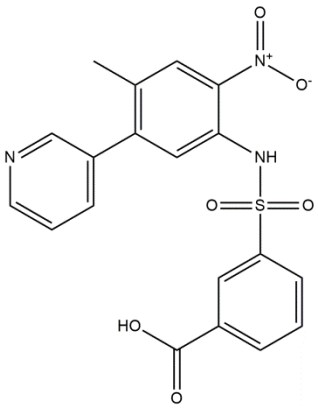
Alofanib

04/20

ALTERNATE NAMES: RPT835; 3-[(4-methyl-2-nitro-5-pyridin-3-ylphenyl)sulfamoyl]benzoic acid; Benzoic acid, 3-(((4-methyl-2-nitro-5-(3-pyridinyl)phenyl)amino)sulfonyl)-

CATALOG #:
B3009-5 5 mg
B3009-25 25 mg

STRUCTURE:



MOLECULAR FORMULA: $C_{19}H_{15}N_3O_6S$

MOLECULAR WEIGHT: 413.4

CAS NUMBER: 1612888-66-0

APPEARANCE: Yellow Solid

PURITY: >98%

SOLUBILITY: ~30 mg/ml in DMSO

DESCRIPTION: Alofanib is a novel selective allosteric inhibitor of fibroblast growth factor receptor 2 (FGFR2) tyrosine kinase. It inhibits phosphorylation of FGF receptor substrate 2α (FRS2α) with IC_{50} values of 7 nM and 9 nM in cancer cells expressing different FGFR2 isoforms. It inhibits FGF-mediated proliferation in a panel of four cell lines representing tumor types such as triple-negative breast cancer, melanoma, and ovarian cancer with 50% growth inhibition (GI_{50}) values of 16 nM-370 nM. It inhibits the proliferation and migration of human and mouse endothelial cells. It ablates experimental FGF-induced angiogenesis *in vivo*. Oral administration of alofanib shows potent antitumor activity in a FGFR-driven human tumor xenograft model.

STORAGE TEMPERATURE: -20ºC. Store in the dark. Product is light sensitive. Protect from air. Store under desiccating conditions.

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

REFERENCE: Tsimafeyeu, I., Ludes-Meyers, J., Stepanova, E., et al. Targeting FGFR2 with alofanib (RPT835) shows potent activity in tumour models. Eur J Cancer. 61:20-8 (2016).

RELATED PRODUCTS:

Savolitinib (Cat. No. B3006)
Zanubrutinib (Cat. No. B2512)
Avitinib (Cat. No. B2995)
Merestinib (Cat. No. B3007)
Roblitinib (Cat. No. B3008)

DISCLAIMER: ***FOR RESEARCH USE ONLY! Not to be used on humans.***