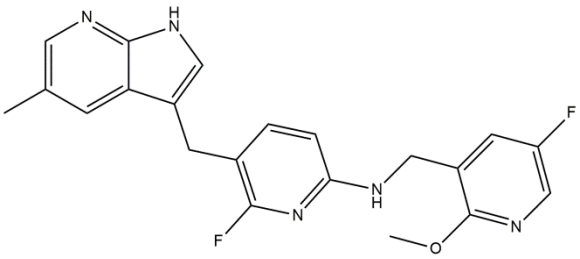
PLX5622 (free base)

ALTERNATE NAME: 6-fluoro-N-[(5-fluoro-2-methoxypyridin-3-yl)methyl]-5-[(5-methyl-1H-pyrrolo[2,3-b]pyridin-3-yl)methyl]pyridin-2-amine

CATALOG #:
B2965-5 5 mg
B2965-25 25 mg

STRUCTURE:



MOLECULAR FORMULA: $C_{21}H_{19}F_2N_5O$

MOLECULAR WEIGHT: 395.41

CAS NUMBER: 1303420-67-8

APPEARANCE: Solid

PURITY: >98%

SOLUBILITY: Soluble in DMSO

DESCRIPTION: PLX5622 is an inhibitor of colony-stimulating factor 1 receptor (CSF1R) tyrosine kinase with a K_i of 5.9 nM. It causes sustained and specific elimination of microglia. As a result of microglial depletion, plaques fail to form in the parenchymal space in the 5xFAD mouse model of Alzheimer's disease (AD). Inhibition of the CSF1R at lower doses in 3xTg-AD mice prevents microglial association with plaques and improves cognition.

STORAGE TEMPERATURE: -20ºC

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

REFERENCES:

1. Dagher, N.N., Najafi, A.R, Kayala, K.M., et al. Colony-stimulating factor 1 receptor inhibition prevents microglial plaque association and improves cognition in 3xTg-AD mice. J Neuroinflammation. 12:139 (2015).
2. Spangenberg, E., Severson, P.L., Hohsfield, L.A., et al. Sustained microglial depletion with CSF1R inhibitor impairs parenchymal plaque development in an Alzheimer's disease model. Nat Commun. 10(1):3758 (2019).

RELATED PRODUCTS:

cFMS Receptor Inhibitor IV (Cat. No. B2922)
LX-2343 (Cat. No. B2120)
Leucettine L41 (Cat. No. 2617)
Semagacestat (Cat. No. 2430)
Thiamet G (Cat. No. B2959)

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