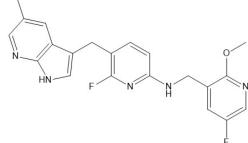
Tribioscience

PLX5622, CSF1R inhibitor (highly selective)

Catalog	Unit
TBI4726-5MG	5 mg
TBI4726-25MG	25 mg

Product Details

Formal Name: 6-Fluoro-N-[(5-fluoro-2-methoxypyridin-3-yl)methyl]-5-[(5-methyl-1H-pyrrolo[2,3-b]pyridine-3yl)methyl]pyridine-2-amine Molecular Formula: C₂₁H₁₉F₂N₅O Formula Weight: 395.41 CAS Number: 1303420-67-8 **Purity:** >98% Formulation: powder Solubility: Soluble in DMSO (up to at least 25 mg/ml) Storage: -20°C **Stability:** \geq 2 years.



Applications

CSF1R inhibitor (highly selective)

Functions

Highly selective (>20 fold over KIT and FLT3, >60 fold over 200 other kinases) and brain-penetrant inhibitor of colonystimulating factor 1 receptor (CSF1R; IC50 = 16 nM). It prevented plaque formation in 5xFAD and 3xTg mouse models of Alzheimer's disease via elimination of microglia in a CSF1R-dependent manner. PLX5622 showed efficacy in a mouse neuropathic pain model via reduction of CD86+ macrophages resulting in reduced expression of pro-inflammatory cytokines. It also was able to ameliorate peripheral neuropathy in aging mice. PLX5622 displayed neuroprotective effects during the chronic phase of a traumatic brain injury mouse model. PLX5622 has also been shown to affect myeloid and lymphoid compartments, indicating that its affects are not limited to microglia and include peripheral immune cells.

Application Procedures

First dissolved in DMSO (up to at least 25 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 3 months.

For research use only.