Altiratinib
Item No. 18777

CAS Registry No.: 1345847-93-9
Formal Name: N-[4-[[2-[(cyclopropylcarbonyl)amino]-4-pyridinyl]oxy]-2,5-difluorophenyl]-N'-(4-fluorophenyl)-1,1-cyclopropanedicarboxamide

MF: C_{26}H_{21}F_{3}N_{4}O_{4}
FW: 510.5
Purity: ≥98%
UV/Vis.: \( \lambda_{\text{max}} \): 243 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: As supplied, 2 years from the QC date provided on the Certificate of Analysis, when stored properly

Laboratory Procedures

Altiratinib is supplied as a crystalline solid. A stock solution may be made by dissolving the altiratinib in the solvent of choice. Altiratinib is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of altiratinib in these solvents is approximately 10 mg/ml.

Altiratinib is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, altiratinib should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Altiratinib has a solubility of approximately 0.33 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Altiratinib is a multiple kinase inhibitor, blocking Met, Tie2, VEGF2, TrkA, TrkB, and TrkC with IC\(_{50}\) values of 2.7, 8.0, 9.2, 0.85, 4.6, and 0.83 nM, respectively.\(^1\) It also inhibits several mutant Met isoforms at nanomolar concentrations. Altiratinib inhibits the proliferation of several cancer cell lines in vitro and blocks capillary tube formation by HMVEC cells.\(^2\) It is orally bioavailable and penetrates the blood brain barrier, suppressing the growth of subcutaneous and intracerebroventricular xenograft tumors in mice.\(^1,2\)

References