# **PRODUCT INFORMATION**



### **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:  $C_{26}H_{21}F_3N_4O_4$ 

FW: 510.5 **Purity:** ≥98%

UV/Vis.:  $\lambda_{max}$ : 243 nm Supplied as: A crystalline solid

-20°C Storage: Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

## **Laboratory Procedures**

Altiratinib is supplied as a crystalline solid. A stock solution may be made by dissolving the altiratinib in the solvent of choice, which should be purged with an inert gas. Altiratinib is soluble in organic solvents such as DMSO and dimethyl formamide. 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 IC50 values of 2.7, 8.0, 9.2, 0.85, 4.6, and 0.83 nM, respectively. 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. It is orally bioavailable and penetrates the blood brain barrier, suppressing the growth of subcutaneous and intracerebroventricular xenograft tumors in mice. 1,2

#### References

- 1. Smith, B.D., Kaufman, M.D., Leary, C.B., et al. Altiratinib Inhibits Tumor Growth, Invasion, Angiogenesis, and Microenvironment-Mediated Drug Resistance via Balanced Inhibition of MET, TIE2, and VEGFR2. Mol. Cancer Ther. 14(9), 2023-2034 (2015).
- 2. Piao, Y., Park, S.Y., Henry, V., et al. Novel MET/TIE2/VEGFR2 inhibitor altiratinib inhibits tumor growth and invasiveness in bevacizumab-resistant glioblastoma mouse models. Neuro. Oncol. 18(9), 1230-1241 (2016).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

## WARRANTY AND LIMITATION OF REMEDY

uyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website

Copyright Cayman Chemical Company, 08/29/2023

#### **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