

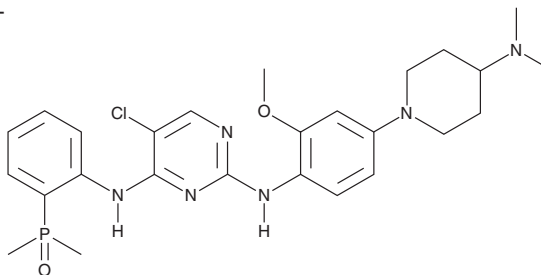
PRODUCT INFORMATION



ALK-IN-1

Item No. 18775

CAS Registry No.: 1197958-12-5
Formal Name: 5-chloro-N²-[4-[4-(dimethylamino)-1-piperidinyl]-2-methoxyphenyl]-N⁴-[2-(dimethylphosphinyl)phenyl]-2,4-pyrimidinediamine
MF: C₂₆H₃₄ClN₆O₂P
FW: 529.0
Purity: ≥98%
UV/Vis.: λ_{max}: 288 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

ALK-IN-1 is supplied as a crystalline solid. A stock solution may be made by dissolving the ALK-IN-1 in the solvent of choice, which should be purged with an inert gas. ALK-IN-1 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of ALK-IN-1 in ethanol and DMSO is approximately 25 mg/ml and approximately 30 mg/ml in DMF.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of ALK-IN-1 can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of ALK-IN-1 in PBS, pH 7.2, is approximately 0.3 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

ALK-IN-1 is an analog of AP26113, a phosphine oxide-containing ALK inhibitor. ALK-IN-1 potently inhibits ALK (IC₅₀ = 0.07 nM) over IGF-1R and InsR (IC₅₀s = 3.2 and 100 nM, respectively).¹ It drives cell death in (ALK+) Karpas-299 lymphoma cells with an IC₅₀ value of 41.5 nM, while killing (ALK-) U937 cells with an IC₅₀ value of 1,718 nM.¹

Reference

1. Huang, W.-S., Liu, S., Zou, D., *et al.* Discovery of brigatinib (AP26113), a phosphine oxide-containing, potent, orally active inhibitor of anaplastic lymphoma kinase. *J. Med. Chem.* (2016).

WARNING

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

SAFETY DATA

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.

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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