

PRODUCT INFORMATION



CH5424802
Item No. 18516

CAS Registry No.: 1256580-46-7
Formal Name: 9-ethyl-6,11-dihydro-6,6-dimethyl-8-[4-(4-morpholinyl)-1-piperidiny]-11-oxo-5H-benzo[b]carbazole-3-carbonitrile

Synonyms: Alectinib, RO5424802

MF: C₃₀H₃₄N₄O₂

FW: 482.6

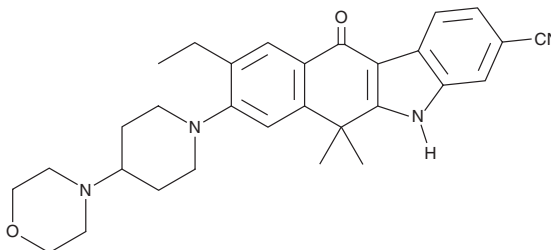
Purity: ≥95%

Supplied as: A crystalline solid

UV/Vis.: λ_{max}: 232, 262, 281, 337 nm

Storage: -20°C

Stability: ≥4 years



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

Laboratory Procedures

CH5424802 is supplied as a crystalline solid. A stock solution may be made by dissolving the CH5424802 in the solvent of choice. CH5424802 is soluble in the organic solvent dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of CH5424802 in this solvent is approximately 3 mg/ml.

CH5424802 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CH5424802 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. CH5424802 has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Anaplastic lymphoma kinase (ALK) is a receptor tyrosine kinase that promotes cell proliferation and blocks apoptosis. CH5424802 is an ATP-competitive inhibitor of ALK (IC₅₀ = 1.9 nM) that also inhibits F1174L, R1275Q, and L1196M mutants of ALK (IC₅₀s = 1.0, 3.5, and 1.6 nM, respectively).^{1,2} It shows more than 500-fold selectivity for ALK over a panel of 24 other kinases.¹ CH5424802 is orally available and inhibits the growth of tumors in mouse xenograft models of nonsmall cell lung cancer and anaplastic large-cell lymphoma.¹

References

1. Sakamoto, H., Tskaguchi, T., Hiroshima, S., *et al.* CH5424802, a selective ALK inhibitor capable of blocking the resistant gatekeeper mutant. *Cancer Cell* **19**, 679-690 (2011).
2. Awad, M.M. and Shaw, A.T. ALK inhibitors in non-small cell lung cancer: crizotinib and beyond. *Clin. Adv. Hematol. Oncol.* **12(7)**, 429-439 (2014).

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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