

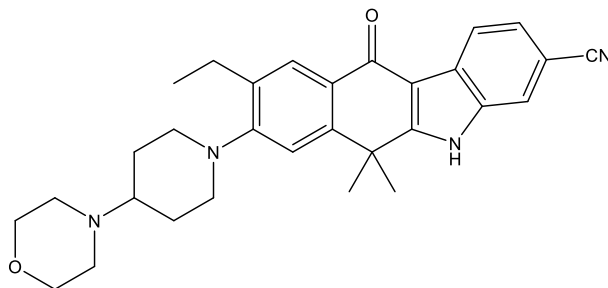
Catalog # 10-4793

Alectinib

CAS# 1256580-46-7

9-Ethyl-6,6-dimethyl-8-(4-morpholin-4-ylpiperidin-1-yl)-11-oxo-5H-benzo[b]carbazole-3-carbonitrile; CH5424802

Lot # FBS2047



Alectinib is a potent ($IC_{50} = 1.9$ nM) and highly selective ALK inhibitor.¹ It blocked phosphorylation of both native ALK and the L1196M, C1156Y, and F1174L mutants. Alectinib has also been shown to inhibit RET kinase ($IC_{50} = 4.8$ nM), the RET gatekeeper mutations V804L and V804M, and inhibited the growth of RET fusion positive cells.² Alectinib is clinically useful in the treatment of ALK-positive Non-Small Cell Lung Cancer. It effectively suppressed cell proliferation and induced apoptosis in a mouse neuroblastoma xenograft.³

- 1) Sakamoto *et al.* (2011), *CH5424802, a selective ALK inhibitor capable of blocking the resistant gatekeeper mutant*; *Cancer Cell*, **19** 679
- 2) Kodama *et al.* (2014), *Alectinib Shows Potent Antitumor Activity against RET-Rearranged Non-Small Cell Lung Cancer.*, *Mol. Cancer Ther.* **13** 2910
- 3) Lu *et al.* (2017), *The second-generation ALK inhibitor alectinib effectively induces apoptosis in human neuroblastoma cells and inhibits tumor growth in a TH-MYCN transgenic neuroblastoma mouse model*; *Cancer Lett*, **400** 61

PHYSICAL DATA

Molecular Weight:	482.62
Molecular Formula:	C ₃₀ H ₃₄ N ₄ O ₂
Purity:	99% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (5 mg/mL with warming)
Physical Description:	White solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 1 year from the date of purchase. Make solutions fresh daily.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.