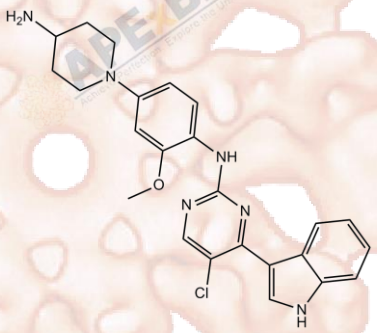
Product Data Sheet

AZD-3463



Cat. No.: A8620
CAS No.: 1356962-20-3
Formula: C24H25ClN6O
M.Wt: 448.95
Synonyms:
Target: Tyrosine Kinase
Pathway: ALK
Storage: Store at -20°C

Solvent & Solubility

In Vitro

insoluble in H2O; insoluble in EtOH; ⩾11.22 mg/mL in DMSO

Preparing Stock Solutions

Concentration \ Mass / Solvent	1mg	5mg	10mg
1 mM	2.2274 mL	11.1371 mL	22.2742 mL
5 mM	0.4455 mL	2.2274 mL	4.4548 mL
10 mM	0.2227 mL	1.1137 mL	2.2274 mL

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary	ALK/IGF1R inhibitor
IC_{50} & Target	0.75 nM(Ki) (ALK)

In Vitro

Cell Viability Assay

Cell Line:	ALK wild type cell lines (SK-N-AS, IMR-32, NGP, NB-19) and ALK mutant cell lines (LA-N-6 (D1091N) and SH-SY5Y (WT/F1174L))
Preparation method:	The solubility of this compound in DMSO is >11.2mg/mL. General tips for obtaining a higher concentration: Please warm the tube at 37°C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

	Reacting conditions:	0~50 μM, 72h
	Applications:	AZD-3463 effectively suppressed the proliferation of neuroblastoma cell lines with wild type ALK as well as ALK activating mutations by blocking the ALK-mediated PI3K/AKT/mTOR pathway and ultimately induced apoptosis and autophagy.
In Vivo	**Animal experiment**	
	Animal models:	Orthotopic Neuroblastoma Mouse Model
	Dosage form:	15 mg/kg intraperitoneal injection once daily for 2 days.
	Applications:	AZD-3463 exhibited significant therapeutic efficacy on the growth of the neuroblastoma tumors with WT and F1174L activating mutation ALK in orthotopic xenograft mouse models.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

1. Wilson C, Nimick M, et al. "ALK and IGF-1R as independent targets in crizotinib resistant lung cancer." Sci Rep. 2017 Oct 24;7(1):13955.PMID:29066738

2. Hawkinson JE, Sinville R, et al."Potent Pyrimidine and Pyrrolopyrimidine Inhibitors of Testis-Specific Serine/Threonine Kinase 2 (TSSK2)." ChemMedChem. 2017 Sep 26.PMID:28952188

3. Wang Y, Wang L, et al. "Novel ALK inhibitor AZD3463 inhibits neuroblastoma growth by overcoming crizotinib resistance and inducing apoptosis." Sci Rep. 2016 Jan 20;6:19423.PMID:26786851

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References

[1] Wang Y, Wang L, Guan S, Cao W, Wang H, Chen Z, et al. Novel ALK inhibitor AZD3463 inhibits neuroblastoma growth by overcoming crizotinib resistance and inducing apoptosis. Sci Rep. 2016;6:19423.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APExBIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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