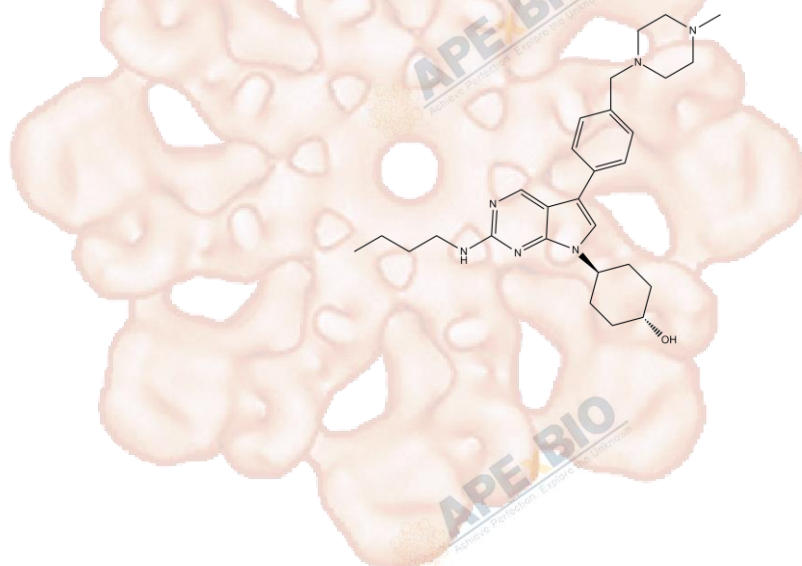


Product Data Sheet

UNC2025

Cat. No.:	B8016
CAS No.:	1429881-91-3
Formula:	C ₂₈ H ₄₀ N ₆ O
M.Wt:	476.66
Synonyms:	
Target:	Tyrosine Kinase
Pathway:	FLT3
Storage:	Desiccate at -20°C



Solvent & Solubility

≥23.85 mg/mL in DMSO; insoluble in EtOH; ≥6.09 mg/mL in H₂O with ultrasonic

In Vitro

Preparing Stock Solutions	Solvent		Mass		
	Concentration		1mg	5mg	10mg
	1 mM		2.0979 mL	10.4897 mL	20.9793 mL
	5 mM		0.4196 mL	2.0979 mL	4.1959 mL
	10 mM		0.2098 mL	1.0490 mL	2.0979 mL

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

Biological Activity

Shortsummary

orally bioavailable dual MER/FLT3 inhibitor

IC₅₀ & Target

Cell Viability Assay

In Vitro

Cell Line:	697 B-ALL cells; Flt3-ITD positive Molm-14 acute myeloid leukemia cells; A549 NSCLC cells
Preparation method:	The solubility of this compound in DMSO is >23.9mg/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:	0-300 nM; 1 h
	Applications:	In 697 B-ALL cells, UNC2025 inhibited Mer phosphorylation with IC50 value of 2.7 nM. In Flt3-ITD positive Molm-14 acute myeloid leukemia cells, UNC2025 inhibited phosphorylation of Flt3 with an IC50 of 14 nM. In A549 NSCLC cells and Molm-14 AML cells, UNC2025 inhibited colony formation in Mer-dependent and Flt3-dependent way.
In Vivo	Animal experiment	
	Animal models:	mice with human leukemia xenografts
	Dosage form:	3 mg/kg; orally
	Applications:	In mice with human leukemia xenografts, UNC2025 inhibited Mer phosphor-protein levels in bone marrow leukemia cells by greater than 90%.
	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. McDaniel NK, Cummings CT, et al. "MERTK mediates intrinsic and adaptive resistance to AXL-targeting agents." Mol Cancer Ther. 2018 Aug 9. pii: molcanther.1239.2017.PMID:30093568

See more customer validations on www.apexbt.com.

References

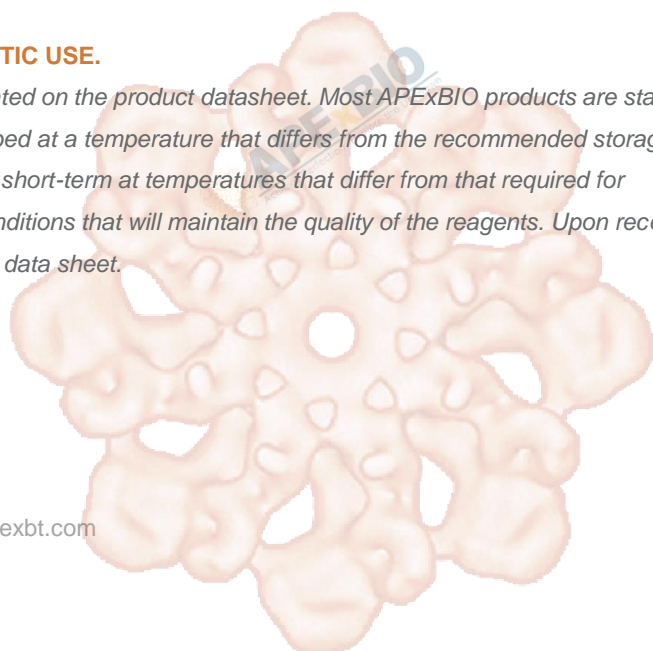
[1]. Zhang W1, DeRyckere D, Hunter D, Liu J, Stashko MA, Minson KA, et al. UNC2025, a potent and orally bioavailable MER/FLT3 dual inhibitor. J Med Chem. 2014 Aug 28;57(16):7031-41. doi: 10.1021/jm500749d. Epub 2014 Aug 6.

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 APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term 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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