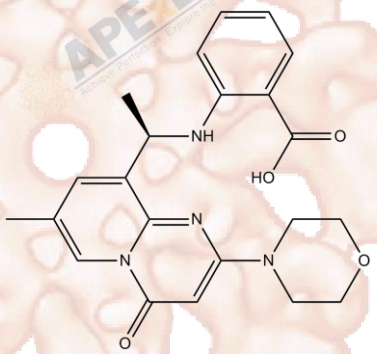
Product Data Sheet

AZD6482



Cat. No.:	A5478
CAS No.:	1173900-33-8
Formula:	C22H24N4O4
M.Wt:	408.45
Synonyms:	
Target:	PI3K/Akt/mTOR Signaling
Pathway:	PI3K
Storage:	Store at -20°C

Solvent & Solubility

In Vitro

insoluble in H2O; ⩾20.4 mg/mL in DMSO; ⩾6.36 mg/mL in EtOH

Preparing Stock Solutions

Mass / Solvent / Concentration	1mg	5mg	10mg
1 mM	2.4483 mL	12.2414 mL	24.4828 mL
5 mM	0.4897 mL	2.4483 mL	4.8966 mL
10 mM	0.2448 mL	1.2241 mL	2.4483 mL

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

Biological Activity

Shortsummary	PI3Kβ inhibitor,potent and selective
IC_{50} & Target	10 nM (PI3Kβ), 80 nM (PI3Kδ), 420 nM (DNA-PK), 870 nM (PI3Kα), 1090 nM (PI3Kγ)

In Vitro

Cell Viability Assay

Cell Line:	Primary human insulin sensitive adipocytes
Preparation method：	The solubility of this compound in DMSO is >20.4mg/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:	0.4-1 μM

	Applications:	AZD6482 is a novel isoform-selective inhibitor of PI3Kβ (phosphoinositide 3-kinase) that blocks the interaction of the enzyme with ATP. AZD6482 concentration-dependently inhibited insulin-induced glucose uptake by human adipocytes. Taken together, AZD6482 inhibited platelet aggregation induced by low agonist concentrations.
In Vivo	**Animal experiment**	
	Animal models:	Folts dog model
	Dosage form:	intravenously (i.v.) over 30-min periods (bolus 0.03–1.3 μg kg-1) and (infusion 0.005–0.24 μg kg min-1)
	Applications:	In vivo in dog, AZD6482 induced a concentration-dependent anti-thrombotic effect in vivo in the dog [abolition of the CFRs(cyclic flow reductions)]. AZD6482 left the shear induced primary platelet aggregation intact but inhibits secondary platelet aggregation, produced a complete antithrombotic effect without significantly compromising hemostasis as no increase in bleeding time or blood loss was seen at plasma exposure that achieved a full anti-thrombotic effect.
	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

See more customer validations on www.apexbt.com.

References

[1]. Nylander S, Kull B, Bjrkman JA ., et al.Human target validation of phosphoinositide 3-kinase (PI3K)β: effects on platelets and insulin sensitivity, using AZD6482 a novel PI3Kβ inhibitor. J Thromb Haemost. 2012 Oct;10(10):2127-36.

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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