AZD3514

Catalog No.C12399 Batch:C1239903

Product Datasheet

Technical Data

Formula	$C_{25}H_{32}F_3N_7O_2$					
Molecular Weight	519.56	**CAS No.**	1240299-33-5			
Solubility (25°C)*	In vitro	DMSO	100 mg/mL (192.47 mM)			
		Ethanol	100 mg/mL (192.47 mM)			
		Water	Insoluble			
	In vivo (Add solvents to the product individually and in order)	Oral Administration	Homogeneous suspension	CMC-NA	≥5mg/ml	Taking the 1 mL working solution as an example, add 5 mg of this product to 1 ml of CMC-Na solution, mix evenly to obtain a homogeneous suspension with a final concentration of 5 mg/ml.
		Injection	Clear solution	5%DMSO [1] → 40%PEG300 [2] → 5%Tween80 [3] → 50%ddH2O Validated by Capsid Bio labs. Should you need adjustments to this formulation, contact our sales team for custom testing.	5.000mg/ml (9.62mM)	Taking the 1 mL working solution as an example, add 50 μL of 100 mg/ml clarified DMSO stock solution to 400 μL of PEG300, mix evenly to clarify it; add 50 μL of Tween80 to the above system, mix evenly to clarify; then continue to add 500 μL of ddH2O to adjust the volume to 1 mL. The mixed solution should be used immediately for optimal results.
			Clear solution	5% DMSO [1] → 95% Corn oil Validated by Capsid Bio labs. Should you need adjustments to this formulation, contact our sales team for custom testing.	0.800mg/ml (1.54mM)	Taking the 1 mL working solution as an example, add 50 μL of 16 mg/ml clear DMSO stock solution to 950 μL of corn oil and mix evenly. The mixed solution should be used immediately for optimal results.

* <1 mg/ml means slightly soluble or insoluble.
* Please note that Capsid Bio tests the solubility of all compounds in-house, and the actual solubility may differ slightly from published values. This is normal and is due to slight batch-to-batch variations.
* Room temperature shipping (Stability testing shows this product can be shipped at 2-8°C for storage purposes.)

Preparing Stock Solutions

Concentration \ Volume / Mass	1 mg	5 mg	10 mg
1 mM	1.9247 mL	9.6235 mL	19.2471 mL
5 mM	0.3849 mL	1.9247 mL	3.8494 mL
10 mM	0.1925 mL	0.9624 mL	1.9247 mL
50 mM	0.0385 mL	0.1925 mL	0.3849 mL

Biological Activity

Description	AZD3514 is a potent and oral **androgen receptor** downregulator with $\mathbf{K_i}$ of 2.2 μM and has ability of reducing AR protein expression.Phase 1.
Targets	Androgen Receptor [1] 2.2 μM(Ki)
In vitro	AZD3514 binds to the AR ligand binding domain and has selectivity for binding to AR over other nuclear hormone receptors. In vitro this compound inhibits cell growth in prostate cancer cells expressing wild-type (VCaP) and mutated (T877A) AR (LNCaP), but is inactive in AR-negative prostate cancer cells. It causes a rapid reduction in PSA synthesis in vitro; with a significant decrease in PSA mRNA being evident in LNCaP cells within 2-3 h of compound treatment. This chemical inhibits an androgen-induced translocation of AR from the cytoplasm to the nucleus within a comparable time-frame in LNCaP cells and U2OS AR-transfected cells. Its treatment also reduces AR protein in LNCaP cells maintained in steroid-depleted conditions; an effect which is evident within 6-8 h, and maximal at 18-24 h.
In vivo	The mode of action of AZD3514 is associated with loss of AR function. Administration of this compound (100 mg/kg/day orally) for 3 days to Copenhagen rats bearing R3327H Dunning prostate tumours, indicates that this chemical treatment also reduces tumour AR in vivo. [2]

References

https://pubmed.ncbi.nlm.nih.gov/23466225/ http://cancerres.aacrjournals.org/cgi/content/short/72/8_Meetin…

RETURN POLICY

Capsid Bio's Unconditional Return Policy ensures a smooth online shopping experience for our customers. If you are in any way unsatisfied with your purchase, you may return any item(s) within 7 days of receiving it. In the event of product quality issues, either protocol related or product related problems, you may return any item(s) within 365 days from the original purchase date. Please follow the instructions below when returning products.

SHIPPING & STORAGE

Capsid Bio products are transported at room temperature. If you receive the product at room temperature, please rest assured, the Capsid Bio Quality Inspection Department has conducted experiments to verify that the normal temperature placement of one month will not affect the biological activity of powder products. After collecting, please store the product according to the requirements described in the datasheet. Most Capsid Bio products are stable under the recommended conditions.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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