PRODUCT INFORMATION GSK2334470



. 18095

CAS Registry No.:			
Formal Name:	(3S,6R)-1-[6-(3-amino-1H-	N.	H
	indazol-6-yl)-2-(methylamino)-		
	4-pyrimidinyl]-N-cyclohexyl-6-	H N	
	methyl-3-piperidinecarboxamide		
MF:	C ₂₅ H ₃₄ N ₈ O		
FW:	462.6		
Purity:	≥98%		
Stability:	≥2 years at -20°C	\sim	\sim γ
Supplied as:	A crystalline solid		NH ₂
UV/Vis.:	λ_{max} : 211, 226, 258, 328 nm		

Laboratory Procedures

For long term storage, we suggest that GSK2334470 be stored as supplied at -20°C. It should be stable for at least two years.

GSK2334470 is supplied as a crystalline solid. A stock solution may be made by dissolving the GSK2334470 in the solvent of choice. GSK2334470 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of GSK2334470 in these solvents is approximately 20 mg/ml.

GSK2334470 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, GSK2334470 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. GSK2334470 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

3-Phosphoinositide-dependent protein kinase 1 (PDK1) is a serine-threonine kinase that plays an important role in growth factor signaling by phosphorylating and activating a group of kinases, including protein kinase (PK)B, PKA, and certain isoforms of PKC. GSK2334470 is an inhibitor of PDK1 (IC_{50} = ~10 nM) that even at 100-fold higher concentrations does not affect the activity of 93 other protein kinases, including that of 13 closely related AGC kinase family members.¹ In HEK293 cells, 30 nM - 1 μM GSK2334470 suppresses T-loop phosphorylation and activation of SGK, S6K1, and RSK, as well as the activation of Akt.¹

Reference

1. Najafov, A., Sommer, E.M., Axten, J.M., et al. Characterization of GSK2334470, a novel and highly specific inhibitor of PDK1. Biochem. J. 433(2), 357-369 (2011).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFFTY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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