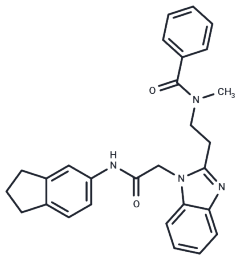
Data Sheet (Cat.No.T38361)

TargetMol

GSK717

Chemical Properties



CAS No. : 1595278-21-9

Formula: C28H28N4O2

Molecular Weight: 452.55

Storage: Store at low temperature
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	GSK717 is a potent, selective NOD2 (nucleotide-binding oligomerization domain 2) inhibitor that inhibits muramyl dipeptide (MDP)-induced NOD2-mediated signaling with an IC50 of 400 nM for MDP-stimulated IL-8 secretion in HEK293/hNOD2 cells[1]. It blocks the synergy between NOD2 and TLR2 without affecting NOD1, TNFR1, and TLR2-mediated responses. At 5 μM, GSK717 inhibits the release of IL-8, IL-6, TNFα, and IL-1β in primary human monocytes stimulated with MDP[1]. [1]. Rickard DJ, et al. Identification of benzimidazole diamides as selective inhibitors of the nucleotide-binding oligomerization domain 2 (NOD2) signaling pathway. PLoS One. 2013;8(8):e69619. Published 2013 Aug 1.
Targets(IC50)	NOD-like Receptor (NLR),NOD,IL Receptor
In vitro	GSK717 (5 μM) inhibits the release of IL-8, IL-6, TNFα and IL-1β in primary human monocytes stimulated with MDP. GSK717 inhibits muramyl dipeptide (MDP)-induced NOD2-mediated signaling, with an IC50 of 400 nM for MDP-stimulated IL-8 secretion in HEK293/hNOD2 cells[1].

Solubility Information

Solubility	DMSO: 135 mg/mL (298.31 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: < 10 mg/mL (22.1 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 10 mg/mL (22.1 mM),Solution. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2097 mL	11.0485 mL	22.097 mL
5 mM	0.4419 mL	2.2097 mL	4.4194 mL
10 mM	0.221 mL	1.1049 mL	2.2097 mL
50 mM	0.0442 mL	0.221 mL	0.4419 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Rickard DJ, et al. Identification of benzimidazole diamides as selective inhibitors of the nucleotide-binding oligomerization domain 2 (NOD2) signaling pathway. PLoS One. 2013;8(8):e69619. Published 2013 Aug 1.