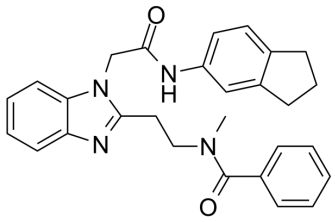
GSK717

Cat. No.:	HY-136555
CAS No.:	1595278-21-9
Molecular Formula:	$C_{28}H_{28}N_4O_2$
Molecular Weight:	452.55
Target:	NOD-like Receptor (NLR)
Pathway:	Immunology/Inflammation
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 2 years -20°C 1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 250 mg/mL (552.43 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.2097 mL	11.0485 mL	22.0970 mL
	5 mM	0.4419 mL	2.2097 mL	4.4194 mL
	10 mM	0.2210 mL	1.1049 mL	2.2097 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.08 mg/mL (4.60 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.08 mg/mL (4.60 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.08 mg/mL (4.60 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

GSK717 is a potent, selective NOD2 (nucleotide-binding oligomerization domain 2) inhibitor. GSK717 inhibits muramyl dipeptide (MDP)-induced NOD2-mediated signaling, with an IC_{50} of 400 nM for MDP-stimulated IL-8 secretion in HEK293/hNOD2 cells[1].

In Vitro

GSK717 blocks synergy between NOD2 and TLR2. GSK717 does not affect NOD1, TNFR1 and TLR2-mediated responses. GSK717 (5 μM) inhibits the release of IL-8, IL-6, TNFα and IL-1β in primary human monocytes stimulated with MDP[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Cell Host Microbe. 2022 Aug 25;S1931-3128(22)00395-X.
- Drug Resist Updat. 2023 Aug 21;71:101005.
- J Exp Clin Cancer Res. 2023 Sep 9;42(1):236.

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REFERENCES

[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.

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