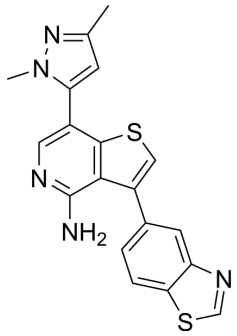
GSK-843

Cat. No.:	HY-125402
CAS No.:	1601496-05-2
Molecular Formula:	$C_{19}H_{15}N_5S_2$
Molecular Weight:	377.49
Target:	RIP kinase; Apoptosis
Pathway:	Apoptosis
Storage:	Powder -20°C 3 years In solvent -80°C 1 year -20°C 6 months



SOLVENT & SOLUBILITY

In Vitro

DMSO : 50 mg/mL (132.45 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	2.6491 mL	13.2454 mL	26.4908 mL
	5 mM	0.5298 mL	2.6491 mL	5.2982 mL
	10 mM	0.2649 mL	1.3245 mL	2.6491 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: 4.8 mg/mL (12.72 mM); Suspended solution; Need ultrasonic
2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.08 mg/mL (5.51 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

GSK-843 (GSK'843) is a receptor-interacting protein kinase 3 (RIP3 or RIPK3) inhibitor, which binds RIP3 kinase domain with an IC_{50} of 8.6 nM, and inhibits kinase activity with an IC_{50} of 6.5 nM. GSK-843 can be used for the research of inflammation[1] [2].

IC_{50} & Target

RIPK3

In Vitro

GSK-843 (3-10 μM; 18 h) induces apoptosis[1].
?GSK-843 (0.3-3 μM; 18 h) suppresses TNF-induced death and virus-induced cell necrosis[2].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.
Cell Viability Assay[1]

Cell Line:	SVEC, L929, 3T3SA and mouse embryo fibroblast (MEF)
Concentration:	3 and 10 μM
Incubation Time:	18 hours
Result:	Decreased the cell viability of SVEC, L929, 3T3SA and MEF cells, and induced caspase activation followed by apoptotic cell death.

Cell Viability Assay[2]

Cell Line:	3T3-SA and SVEC4-10 cells
Concentration:	0.3, 1 and 3 μM
Incubation Time:	18 hours
Result:	Dose-dependently suppressed TNF-induced death and virus-induced necrosis to improved cell viability.

CUSTOMER VALIDATION

- Cancer Lett. 2023 May 5;216208.
- Cell Death Discov. 2022 Feb 26;8(1):88.
- Mol Immunol. 2021 Jan;129:86-93.

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REFERENCES

[1]. Kaiser WJ, et al. Toll-like receptor 3-mediated necrosis via TRIF, RIP3, and MLKL. J Biol Chem. 2013 Oct 25;288(43):31268-79.

[2]. Mandal P, et al. RIP3 induces apoptosis independent of pronecrotic kinase activity. Mol Cell. 2014 Nov 20;56(4):481-95.

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