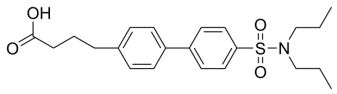
ADS032

Cat. No.:	HY-156798
CAS No.:	2757333-37-0
Molecular Formula:	$C_{22}H_{29}NO_4S$
Molecular Weight:	403.53
Target:	NOD-like Receptor (NLR)
Pathway:	Immunology/Inflammation
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 6 months -20°C 1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (247.81 mM; Need ultrasonic)

Ethanol : 12.5 mg/mL (30.98 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	2.4781 mL	12.3907 mL	24.7813 mL
5 mM	0.4956 mL	2.4781 mL	4.9563 mL
10 mM	0.2478 mL	1.2391 mL	2.4781 mL

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

BIOLOGICAL ACTIVITY

Description

ADS032 is a dual inhibitor of NLRP1 and NLRP3 that can rapidly, reversibly and stably inhibit inflammasome formation. ADS032 can reduce NLPR1 and NLRP3 activation of human macrophages and bronchial epithelial cells to secrete and mature IL-1β and TNF-α, and reduce NLRP3-induced ASC speck formation. ADS032 protected mice against the deadly influenza A virus, reducing inflammation in the lungs and improving survival. ADS032 inhibits Nigericin (HY-127019)-induced IL-1β secretion with IC50s of 94.6 μM (No wash out) and 354 μM (Wash out) respectively[1].

IC_{50} & Target

NLRP1; NLRP3[1]

REFERENCES

[1]. Docherty CA, et al. A novel dual NLRP1 and NLRP3 inflammasome inhibitor for the treatment of inflammatory diseases. Clin Transl Immunology. 2023 Jun 22;12(6):e1455.

Caution: Product has not been fully validated for medical applications. For research use only.

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