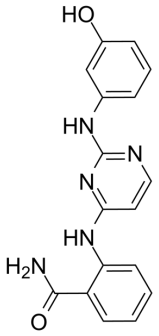
DB07268

Cat. No.:	HY-15737
CAS No.:	929007-72-7
Molecular Formula:	$C_{17}H_{15}N_5O_2$
Molecular Weight:	321
Target:	JNK
Pathway:	MAPK/ERK Pathway
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 32 mg/mL (99.69 mM)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	3.1153 mL	15.5763 mL	31.1526 mL
5 mM	0.6231 mL	3.1153 mL	6.2305 mL
10 mM	0.3115 mL	1.5576 mL	3.1153 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 (6.48 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.08 mg/mL (6.48 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

DB07268 is a potent and selective JNK1 inhibitor with an IC_{50} value of 9 nM.

IC_{50} & Target

JNK1 9 nM (IC_{50})	CHK1 0.82 μM (IC_{50})	PAK4 5.5 μM (IC_{50})	AKT1 15 μM (IC_{50})
ERK2 25 μM (IC_{50})			

In Vitro

DB07268 (Compound 2b) also inhibits CHK1, PAK4, AKT1, and ERK2 with IC50s of 0.82 μM, 5.5 μM, 15 μM, and 25 μM, respectively[1].

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

CUSTOMER VALIDATION

- Cell Metab. 2019 Jul 2;30(1):157-173.e7
- Toxins. 2021 Mar 18;13(3):221.
- J Clin Transl Hepatol. March 21, 2022.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Liu M, et al. Discovery of a new class of 4-anilinopyrimidines as potent c-Jun N-terminal kinase inhibitors: Synthesis and SAR studies. Bioorg Med Chem Lett. 2007 Feb 1;17(3):668-72.

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