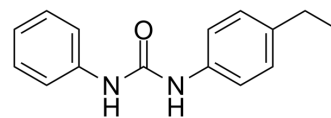


## INH14

Cat. No.:	HY-114454		
CAS No.:	200134-22-1		
Molecular Formula:	C <sub>15</sub> H <sub>16</sub> N <sub>2</sub> O		
Molecular Weight:	240.3		
Target:	IKK		
Pathway:	NF-κB		
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 : ≥ 125 mg/mL (520.18 mM)  
 \* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	4.1615 mL	20.8073 mL	41.6146 mL
	5 mM	0.8323 mL	4.1615 mL	8.3229 mL
	10 mM	0.4161 mL	2.0807 mL	4.1615 mL

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

#### In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
 Solubility: ≥ 2.08 mg/mL (8.66 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
 Solubility: ≥ 2.08 mg/mL (8.66 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

INH14 is a cell permeable inhibitor of IKKα/IKKβ, with IC<sub>50</sub>s of 8.97 and 3.59 μM, respectively. INH14 inhibits the IKKα/β-dependent TLR inflammatory response. INH14 also inhibits downstream of TAK1/TAB1 and NF-κB pathways. Anti-inflammatory and anti-cancer activity<sup>[1]</sup>.

#### IC<sub>50</sub> & Target

IKKβ	IKKα
3.59 μM (IC <sub>50</sub> )	8.97 μM (IC <sub>50</sub> )

#### In Vivo

INH14 (5 μg/g, i.p. for 2 hours) reduces lipopeptide-induced inflammation in mice<sup>[1]</sup>.  
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	8-week old, male, pathogen-free C57BL/6J mice <sup>[1]</sup>
Dosage:	5 µg/g, one hour before Pam2CSK4 injection
Administration:	I.P. for 2 hours
Result:	Decreased TNFα production in mice.

## CUSTOMER VALIDATION

- Adipocyte. 08 Aug 2022.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

[1]. Drexel M, et al. INH14, a Small-Molecule Urea Derivative, Inhibits the IKKα/β-Dependent TLR Inflammatory Response. *Chembiochem*. 2019 Mar 1;20(5):710-717.

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

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