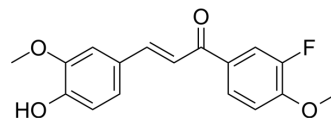


## JC2-11

Cat. No.:	HY-152670
CAS No.:	937820-89-8
Molecular Formula:	C <sub>17</sub> H <sub>15</sub> FO <sub>4</sub>
Molecular Weight:	302.3
Target:	NOD-like Receptor (NLR); AIM2
Pathway:	Immunology/Inflammation
Storage:	4°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO :  $\geq 100$  mg/mL (330.80 mM)  
\* " $\geq$ " means soluble, but saturation unknown.

	Solvent Concentration	Mass	1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM		3.3080 mL	16.5399 mL	33.0797 mL
	5 mM		0.6616 mL	3.3080 mL	6.6159 mL
	10 mM		0.3308 mL	1.6540 mL	3.3080 mL

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

### BIOLOGICAL ACTIVITY

#### Description

JC2-11 is an inhibitor of inflammatory corpuscles. JC2-11 inhibits domain-containing protein NLRC 4, absent in melanoma 2 (AIM 2) and non-canonical (NC) inflammatory corpuscles. JC2-11 reduces the secretion of caspase-1 (p20), the cleavage of gasdermin D (GSDMD), and the releases of IL-1 $\beta$  and lactate dehydrogenases (LDH) in inflammatory bodies. JC2-11 inhibits the activation of inflammatory bodies by destroying the production of reactive oxygen species and the activity of caspase-1 [1].

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

NLRP3 inflammasome

#### In Vivo

JC2-11 (250  $\mu$ g/mouse; i.p.; single dose) significantly inhibits the release of caspase-1 (p20) and IL-1 $\beta$  in non-canonical (NC) inflammatory bodies, and weakens the activation of NC inflammatory bodies of C57BL/6 mice model [1].  
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model: C57BL/6 mice (8 weeks, female) [1].

Dosage:	250 µg/mouse.
Administration:	Intraperitoneal injection; single dose.
Result:	Exhibited inhibitory effect on NC inflammatory body.

## REFERENCES

[1]. Lee G, et al, JC2-11, a benzylideneacetophenone derivative, attenuates inflammasome activation. Sci Rep. 2022 Dec 28;12(1):22484.

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

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