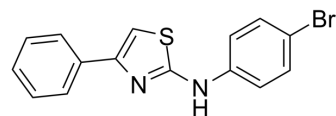


## RCGD423

Cat. No.:	HY-114775		
CAS No.:	108237-91-8		
Molecular Formula:	C <sub>15</sub> H <sub>11</sub> BrN <sub>2</sub> S		
Molecular Weight:	331.23		
Target:	Interleukin Related		
Pathway:	Immunology/Inflammation		
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 (377.38 mM; Need ultrasonic)			
		Solvent Concentration	Mass	
			1 mg	5 mg
	Preparing Stock Solutions	1 mM	3.0191 mL	15.0953 mL
		5 mM	3.0191 mL	6.0381 mL
		10 mM	0.3019 mL	1.5095 mL
	Please refer to the solubility information to select the appropriate solvent.			
In Vivo	<ol style="list-style-type: none"> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% (20% SBE-β-CD in saline) Solubility: 6.25 mg/mL (18.87 mM); Suspended solution; Need ultrasonic</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 40% PEG300 &gt;&gt; 5% Tween-80 &gt;&gt; 45% saline Solubility: ≥ 2.67 mg/mL (8.06 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil Solubility: ≥ 2.67 mg/mL (8.06 mM); Clear solution</li> </ol>			

### BIOLOGICAL ACTIVITY

Description	RCGD423 is a gp130 modulator, which prevents articular cartilage degeneration and promotes repair.
IC <sub>50</sub> & Target	IL6-beta
In Vitro	RCGD423 is a gp130 modulator, which prevents articular cartilage degeneration and promotes repair <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## In Vivo

RCGD423 greatly reduces chondrocyte hypertrophy, loss and degeneration while increasing chondrocyte proliferation beyond that observed in response to injury in a rat partial meniscectomy model. Moreover, RCGD 423 improves cartilage healing in a rat full-thickness osteochondral defect model, increasing proliferation of mesenchymal cells in the defect and also inhibiting breakdown of cartilage matrix in de novo generated cartilage<sup>[1]</sup>.

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

## CUSTOMER VALIDATION

- APL Bioeng. 2022 Apr 21;6(2):026101.

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

## REFERENCES

[1]. Shkhyan R, et al. Drug-induced modulation of gp130 signalling prevents articular cartilage degeneration and promotes repair. Ann Rheum Dis. 2018 May;77(5):760-769.

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

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