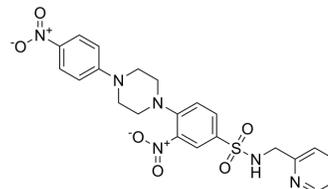


## Anti-inflammatory agent 51

<b>Cat. No.:</b>	HY-155765		
<b>CAS No.:</b>	2911610-03-0		
<b>Molecular Formula:</b>	C <sub>22</sub> H <sub>22</sub> N <sub>6</sub> O <sub>6</sub> S		
<b>Molecular Weight:</b>	498.51		
<b>Target:</b>	NF-κB		
<b>Pathway:</b>	NF-κB		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 125 mg/mL (250.75 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	2.0060 mL	10.0299 mL	20.0598 mL
	5 mM	0.4012 mL	2.0060 mL	4.0120 mL
	10 mM	0.2006 mL	1.0030 mL	2.0060 mL

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

### BIOLOGICAL ACTIVITY

#### Description

Anti-inflammatory agent 51 (compound 11d) is an amide/sulfonamide derivative with anti-inflammatory activities. Anti-inflammatory agent 51 inhibits NF-κB activation, has the potential for acute lung injury and ulcerative colitis research<sup>[1]</sup>.

#### In Vitro

Anti-inflammatory agent 51 (compound 11d) potently reduces the release of IL-6 (IC<sub>50</sub> value of 0.61 μM) and TNF-α (IC<sub>50</sub> of 4.34 μM), and decreased the mRNA level of cytokines in J774A.1 cells. Anti-inflammatory agent 51 restores IκBα and inhibits the translocation of phosphorylated p65 into the nucleus<sup>[1]</sup>.

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

#### In Vivo

Anti-inflammatory agent 51 (compound 11d) improved LPS-induced acute lung injury (ALI) and alleviated DSS-induced ulcerative colitis in mice<sup>[1]</sup>.

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

### REFERENCES

---

[1]. Pan Chen, et al. Design, synthesis, and bioactivity evaluation of novel amide/sulfonamide derivatives as potential anti-inflammatory agents against acute lung injury and ulcerative colitis. *Eur J Med Chem.* 2023 Aug 2;259:115706.

---

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA