

---

**Product Data Sheet**


---

Product Name: MPO-IN-1  
 Cat. No.: GC67918

**Chemical Properties**

Cas. No. 2471981-21-0

Formula  $C_{24}H_{21}ClN_4$  M.Wt 400.9

Solubility DMSO : 200 mg/mL (498.88 mM; ultrasonic and warming and heat to 60°C) Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure

**Background**

MPO-IN-1 is a potent, orally active, and irreversible indole-containing inhibitor of myeloperoxidase (**MPO**). MPO-IN-1 has **IC<sub>50</sub>**s of 2.6 μM and 5.3 μM for MPO and thyroid peroxidase (TPO), respectively. MPO-IN-1 inhibits **MPO** activity in an acute mouse model of inflammation<sup>[1]</sup>.

MPO-IN-1 (compound 2) (5 and 90 mg/kg; p.o.; four hours post-Zymosan A administration) significantly reduces MPO activity in a mouse peritonitis model of acute inflammation<sup>[1]</sup>.

Mouse pharmacokinetic parameter of MPO-IN-1<sup>[1]</sup>.

Dose	$V_{SS}$ (L/kg)	$T_{1/2}$ (h)	$AUC_{inf}$ (nM•h)	p.o. $C_{max}$ (nM)	p.o. PPB (%)	F (%)
1/10 mg/kg i.v./p.o.	9.8	2.6	2486	502	99.6	61

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

---

---

## Product Data Sheet

---

Animal Model: Male C57BL/6J mice (mouse peritonitis model of acute inflammation)[1]

Dosage: 5 and 90 mg/kg

Administration: p.o. (four hours post-Zymosan A administration)

Result: Resulted in a ~50% reduction in the MPO activity at 90 mg/kg.

[1]. Patnaik A, et al. Discovery of a novel indole pharmacophore for the irreversible inhibition of myeloperoxidase (MPO). *Bioorg Med Chem.* 2020;28(12):115548.

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA