# **Product data sheet**



MedKoo Cat#: 558964		
Name: Iptacopan free base		O.
CAS: 1644670-37-0		
Chemical Formula: C <sub>25</sub> H <sub>30</sub> N <sub>2</sub> O <sub>4</sub>		HO'
Exact Mass: 422.2206		
Molecular Weight: 422.502		, N
Product supplied as:	Powder	
Purity (by HPLC):	≥ 98%	
Shipping conditions	Ambient temperature	N
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years.	] н
	In solvent: -80°C 3 months; -20°C 2 weeks.	

## 1. Product description:

Iptacopan is a highly potent and highly selective factor B inhibitor.

# 2. CoA, QC data, SDS, and handling instruction

SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under "QC And Documents" section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
DMSO	50.0	118.34

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.37 mL	11.83 mL	23.67 mL
5 mM	0.47 mL	2.37 mL	4.73 mL
10 mM	0.24 mL	1.18 mL	2.37 mL
50 mM	0.05 mL	0.24 mL	0.47 mL

### 5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator

Please refer the product web page under section of "Calculator"

#### 6. Recommended literature which reported protocols for in vitro and in vivo study

In vitro study

**TBD** 

#### In vivo study

- 1. Chen K, Deng Y, Shang S, Tang L, Li Q, Bai X, Chen X. Complement factor B inhibitor LNP023 improves lupus nephritis in MRL/lpr mice. Biomed Pharmacother. 2022 Sep;153:113433. doi: 10.1016/j.biopha.2022.113433. Epub 2022 Jul 26. PMID: 36076550.
- 2. Jang JH, Wong L, Ko BS, Yoon SS, Li K, Baltcheva I, Nidamarthy PK, Chawla R, Junge G, Yap ES. Iptacopan monotherapy in patients with paroxysmal nocturnal hemoglobinuria: a 2-cohort open-label proof-of-concept study. Blood Adv. 2022 Aug 9;6(15):4450-4460. doi: 10.1182/bloodadvances.2022006960. PMID: 35561315; PMCID: PMC9636331.

### 7. Bioactivity

#### Biological target:

Iptacopan is a factor B inhibitor with an IC50 value of 10 nM. Iptacopan shows direct, reversible, and high-affinity binding to human factor B with a KD of 7.9 nM. Iptacopan targets the underlying cause of complement 3 glomerulopathy (C3G).

In vitro activity

TBD

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In vivo activity

Iptacopan has the potential to improve lupus nephritis (LN) by regulating complement activation and key proteins in LN pathogenesis. In an LN model in MRL/lpr mice, iptacopan resulted in reduced lupus-like symptoms, improved renal function, lower autoantibody levels, and reduced immune complex and complement deposition in the kidneys. Kidney pathology showed less damage, crescent formation, and inflammation.

Reference: Biomed Pharmacother. 2022 Sep;153:113433. https://pubmed.ncbi.nlm.nih.gov/36076550/

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.