

Data Sheet

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 Product Name
 : LNP023

 Cat. No.
 : PC-36148

 CAS No.
 : 1644670-37-0

 Molecular Formula
 : C25H30N2O4

 Molecular Weight
 : 422.525

Target : Complement System
Solubility : 10 mM in DMSO

Biological Activity

Iptacopan (LNP023) is a highly potent, reversible, selective inhibitor of **factor B** (IC50=10 nM), the proteolytically active component of the C3 and C5 convertases.

Iptacopan (LNP023) shows direct, reversible, and high-affinity binding to human FB with Kd of 7.9 nM in SPR assays, demonstrates potent inhibition of AP-induced MAC formation in 50% human serum with IC50 of 0.13 uM. Iptacopan (LNP023) shows no inhibition of factor D (FD), as well as classical or lectin complement pathway activation (up to 100 uM), and no significant effects (up to 10 μ M) in a broad assay panel of receptors, ion channels, kinases, and proteases. Iptacopan (LNP023) blocks zymosan-induced MAC formation membrane attack complex (MAC) with IC50 of 0.15 uM, prevents KRN-induced arthritis in mice and is effective upon prophylactic and therapeutic dosing in an experimental model of membranous nephropathy in rats afer oral administration.

Iptacopan (LNP023) also prevents complement activation in sera from C3 glomerulopathy patients and the hemolysis of human PNH erythrocytes.

References

Schubart A, et al. *Proc Natl Acad Sci U S A.* 2019 Mar 29. pii: 201820892.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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