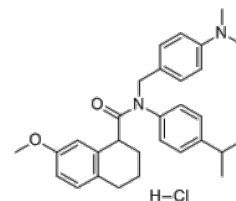


Product Name : W545011
Cat. No. : PC-38846
CAS No. : 405098-33-1
Molecular Formula : C₃₀H₃₇ClN₂O₂
Molecular Weight : 493.088
Target : Complement System
Solubility : 10 mM in DMSO



Biological Activity

W-54011 (W54011) is a potent, selective, orally active and non-peptide C5a receptor antagonist, inhibits the binding of 125I-labeled C5a to human neutrophils with Ki of 2.2 nM.

W-54011 also inhibited C5a-induced intracellular Ca²⁺ mobilization, chemotaxis, and generation of reactive super oxide species in human neutrophils with IC₅₀ values of 3.1, 2.7, and 1.6 nM, respectively.

W-54011 did not show agonistic activity at up to 10 μM in C5a-induced intracellular Ca²⁺ mobilization assay with human neutrophils.

W-54011 effectively inhibited C5a-induced intracellular Ca²⁺ mobilization in neutrophils of cynomolgus monkeys and gerbils but not mice, rats, guinea pigs, rabbits, and dogs.

W-54011 (3-30 mg/kg, oral) inhibited C5a-induced neutropenia in a dose-dependent manner in gerbils.

References

Xaria X Li, et al. Biochem Pharmacol. 2020 Oct;180:114156.

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

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