

## **Data Sheet**

WWW.PROBECHEM.COM

Global Supplier of Chemical Probes, Inhibitors & Agonists.

 Product Name
 : W54011

 Cat. No.
 : PC-38846

 CAS No.
 : 405098-33-1

 Molecular Formula
 : C<sub>30</sub>H<sub>37</sub>CIN<sub>2</sub>O<sub>2</sub>

 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 uM 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!

E-mail: tech@probechem.com