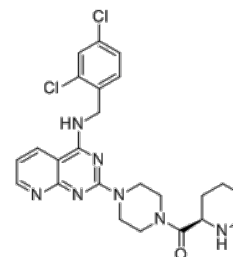


**Product Name** : CCR4-IN-22  
**Cat. No.** : PC-73263  
**CAS No.** : 668980-17-4  
**Molecular Formula** : C<sub>24</sub>H<sub>27</sub>Cl<sub>2</sub>N<sub>7</sub>O  
**Molecular Weight** : 500.428  
**Target** : Chemokine Receptor (CCR and CXCR)  
**Solubility** : 10 mM in DMSO



## Biological Activity

CCR4-IN-22 (Compound 22) is a potent, selective CCR4 antagonist with IC<sub>50</sub> of 20 nM, efficiently inhibits CCR4-mediated Ca<sup>2+</sup> mobilization and chemotaxis in vitro with IC<sub>50</sub> of 3 and 7 nM, respectively.

Compound 22 displays >500-fold less effective against other chemokine receptors (CCR2, CCR3 and CXCR3), and GPCRs (5-HT<sub>1A</sub>, 5-HT<sub>6</sub> and 5-HT<sub>7</sub>).

Compound 22 suppressed eosinophil accumulation in the lungs of antigenimmunized mice in vivo, efficacious in a murine allergic inflammation model (ED<sub>50</sub> 10 mg/kg).

Compound 22, as well as anti-CCL17 or anti-CCL22 antibody selectively suppressed accumulation of Th2 cells and eosinophils in the lungs of Th2-transferred and OVA-challenged mice.

Compound 22 also inhibited bronchial hyperresponsiveness but had little effect on goblet cell hyperplasia in Th2-transferred and OVA-challenged mice.

## References

Ashok V Purandare, et al. *Bioorg Med Chem Lett*. 2007 Feb 1;17(3):679-82.

O Kaminuma, et al. *Clin Exp Allergy*. 2012 Feb;42(2):315-25.

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

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