

Data Sheet

Product Name:	Reslizumab
Cat. No.:	CS-0030900
CAS No.:	241473-69-8
Target:	Interleukin Related
Pathway:	Immunology/Inflammation
Solubility:	10 mM in DMSO

Reslizumab

BIOLOGICAL ACTIVITY:

Reslizumab (Sch 55700) is humanized monoclonal antibodies that target **interleukin-5 (IL-5)** for the treatment of eosinophilic asthma. Reslizumab is effective in neutralizing the function of **IL-5**. Reslizumab has high binding affinity for human **IL-5**, with K_D values of 109 pM and 4.3 pM in the the Biacore surface plasmon resonance and Kinetic Exclusion Assay, respectively^{[1][2]}. IC50 & Target: IC50: 91.1pM (IL-5-dependent cell proliferation)^[1] *In Vitro*: Reslizumab (Sch 55700) (0-10 nM, 48 h) inhibits IL-5-dependent cell proliferation, with an IC₅₀ value of approximately 91.1pM^[1]. *In Vivo*: Reslizumab (Sch 55700) (0-10 mg/kg; i.p. or i.m.) inhibits pulmonary eosinophilia in a dose-dependent manner in allergic mice^[3].

Reslizumab (0.03-30 mg/kg; i.p.) inhibits both the pulmonary eosinophilia and airway hyperresponsiveness, and at 30 mg/kg, i.p. inhibits allergic, but not histamine-induced bronchoconstriction in allergic guinea pigs^[3].

Reslizumab (0.1-1 mg/kg; i.p.) blocks the pulmonary eosinophilia and neutrophilia caused by tracheal injection of hIL-5 in guinea pigs^[3].

Reslizumab (0.3 mg/kg; i.v.) blocks the pulmonary eosinophilia caused by antigen challenge for up to six months in allergic cynomolgus monkeys^[3].

References:

- [1]. Liddament M, et al. Higher Binding Affinity and in vitro Potency of Reslizumab for Interleukin-5 Compared With Mepolizumab. *Allergy Asthma Immunol Res.* 2019 Mar;11(2):291-298.
- [2]. Pérez de Llano LA, et al. Mepolizumab and reslizumab, two different options for severe asthma patients with prior failure to omalizumab. *Allergy.* 2019 Sep 4.
- [3]. Egan RW, Effect of Sch 55700, a humanized monoclonal antibody to human interleukin-5, on eosinophilic responses and bronchial hyperreactivity. *Arzneimittelforschung.* 1999 Sep;49(9):779-90.

CAIndexNames:

Immunoglobulin G4, anti-(human interleukin 5) (human-rat monoclonal SCH 55700 γ 4-chain), disulfide with human-rat monoclonal SCH 55700 light chain, dimer

SMILES:

[Reslizumab]

Caution: Product has not been fully validated for medical applications. For research use only.

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