

Anti-IL-6 receptor [rhPM-1 (Tocilizumab)] Standard Size Ab00737-10.3

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors.

NOT FOR THERAPEUTIC USE - This is a research-grade biosimilar.

Isotype and Format: Human IgG1, Fc Silent™, Kappa

Clone Number: rhPM-1 (Tocilizumab)

Alternative Name(s) of Target: IL6R; IL-6R; CD126; MRA; atlizumab; TCZ; Interleukin-6 receptor subunit alpha; IL-6 receptor subunit alpha; IL-6R subunit alpha; IL-6R-alpha; IL-6RA; IL-6R 1; Membrane glycoprotein 80; gp80; PM1; PM-1

UniProt Accession Number of Target Protein: P08887

Published Application(s): inhibit, ELISA

Published Species Reactivity: Human

Immunogen: The original antibody was generated by CDR grafting of mouse PM-1 antibody onto human REI and NEW framework regions to create rhPM-1.

Specificity: Tocilizumab binds specifically to both the membrane bound and soluble forms of human IL-6R. The IL6 receptor is a protein complex consisting of an IL-6 receptor subunit (IL6R) and interleukin 6 signal transducer Glycoprotein 130. Interleukin 6 (IL6) is a potent pleiotropic cytokine that regulates cell growth and differentiation and plays an important role in immune response.

Application Notes: This antibody is derived from the parental mouse clone PM-1 (PM1). Tocilizumab (TCZ) binds and neutralizes IL-6R, resulting in the inhibition of various IL-6-mediated biological activities, including inflammation-related, immunomodulatory and tissue/matrix remodelling effects. This antibody is extensively explored for its therapeutic potential in treatment of rheumatoid arthritis (PMID: 25099958; 9836380). Tocilizumab can be used in ELISA assays and is able to inhibit the growth of IL-6-dependent tumor cell lines. It inhibits sIL-6R and mL-6R-mediated signaling. A study reported that a combination of tocilizumab and methotrexate (MTX) results in greater inhibition of joint damage and improvement in physical function than does MTX alone (PMID: 21360490). Treatment with tocilizumab results in significant improvement, maintained over time, of polyarticular-course juvenile idiopathic arthritis (pcJIA) signs and symptoms and has a safety profile consistent with that for adults with rheumatoid arthritis (PMID:

24834925).

Antibody First Published in: Sato et al. Reshaping a human antibody to inhibit the interleukin 6-dependent tumor cell growth. Cancer Res. 1993 Feb 15;53(4):851-6. [PMID:8428365](#)

Note on publication: Describes the generation of a reshaped human PM-1 antibody consisting of human REI-based light chain and NEW-based heavy chain variable regions constructed with the assistance of a structural model of the mouse PM-1 variable regions.

Product Form

Size: 200 µg Purified antibody.

Purification: Protein A affinity purified

Supplied In: PBS with 0.02% Proclin 300.

Storage Recommendation: Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

Concentration: 1 mg/ml.

Important note - This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.