

Anti-CD4 [6G5 (Zanolimumab)] Standard Size Ab02329-3.3

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

This chimeric mouse antibody was made using the variable domain sequences of the original Human IgG1 format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Mouse IgG2b, [Fc Silent™](#), Kappa

Clone Number: 6G5 (Zanolimumab)

Alternative Name(s) of Target: Lu/T4; T-cell surface glycoprotein CD4; T-cell surface antigen T4/Leu-3

UniProt Accession Number of Target Protein: P01730

Published Application(s): ELISA, FC, Inhibit,

Published Species Reactivity: chimpanzee, Human, Cynomolgus Monkey

Immunogen: The original antibody was generated by immunizing transgenic mice having functionally disrupted endogenous heavy chain loci (J.sub.HD) and harboring a human heavy chain minigene construct (HC1) with human blood from a single donor.

Specificity: This antibody binds human CD4.

Application Notes: Zanolimumab (clone 6G5, HuMax-CD4, MDX CD4, MDX-016) was among the first fully human mAbs generated from human Ig transgenic mice. The antigen specificity of this antibody was determined using ELISA (PMID: 9631008). The mAb 6G5 was subsequently re-expressed in CHO cells without altering its binding or functional characteristics and renamed HM6G. The avidity of 6G5 for native CD4 expressed on human and nonhuman primate lymphocytes was examined in a flow cytometry assay (PMID: 10444358). Zanolimumab inhibits CD4+ T cells by combining signaling inhibition with potent induction of Fc-mediated effector functions. T cell activation is inhibited by a fast dual mechanism in which the antibody abrogates signaling via the T cell receptor (TCR) and, in addition, down regulates T cell activation by transmission of direct inhibitory signals. In addition, zanolimumab induces killing of CD4+ T cells via antibody-dependent cellular cytotoxicity (PMID: 17942927). Zanolimumab exhibits cytotoxic and anti-proliferative effects and has shown efficacy in T-cell lymphomas. A clinical efficacy and safety study of treatment with weekly dose of 980 mg of HuMax-CD4 in 8 patients having refractory or relapsed CD4+ peripheral T-cell lymphoma (PTCL) of non-cutaneous type revealed that Zanolimumab is well tolerated (PMID: 20629661). Zanolimumab has also been reported to cause depletion of CD4+ T cells from human skin in a human psoriasis xenograft mouse model (PMID: 17091277).

Antibody First Published in: Fishwild et al. High-avidity human IgG kappa monoclonal antibodies from a

novel strain of minilocus transgenic mice. Nat Biotechnol. (1996); 14(7):845-51. [PMID:9631008](#)

Note on publication: Describes the generation of humanized antibodies using transgenic mice.

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.