

Tregalizumab Biosimilar - Research Grade

Product Code: ICH5942

More Information

Species Reactivity: Human

Target: CD4

Concentration: >1mg/ml

Isotype: IgG1 - kappa

Host: CHO Cells

product name H2: Tregalizumab Biosimilar - Research Grade

Antibodies against the same target: [Anti-CD4 \(GK1.5\) In Vivo Antibody - Low Endotoxin \(ICH1042\)](#), [Bulk Anti-Human CD4 \(OKT-4\) Antibody \(ICH1166\)](#), [Anti-Mouse CD4 \(YTS191\) In Vivo Antibody - Low Endotoxin \(ICH1210\)](#), [Anti-Rat CD4 \(OX-38\) In Vivo Antibody - Low Endotoxin \(ICH1255\)](#), [Ibalizumab Biosimilar - Research Grade \(ICH5029\)](#), [Clenoliximab Biosimilar - Research Grade \(ICH5193\)](#), [Cedelizumab Biosimilar - Research Grade \(ICH5430\)](#), [Keliximab Biosimilar - Research Grade \(ICH5616\)](#), [Priliximab Biosimilar - Research Grade \(ICH5788\)](#), [Semzuvolimab Biosimilar - Research Grade \(ICH5851\)](#)

Sequence: <https://www.imgt.org/mAb-DB/>

Buffer: ICH3002

UniProt: P01730

Shipping Conditions: Blue ice

background: ichor.bio ICH5942 is a research-grade biosimilar of tregalizumab, supplied as an unconjugated, non-therapeutic analog of the originator antibody for research use only. Tregalizumab (originally BT-061) is a humanized IgG1 kappa monoclonal antibody directed

against human CD4. Unlike conventional anti-CD4 antibodies, it is non-depleting and was developed as a regulatory T cell (Treg) agonist: it recognizes a distinct conformational epitope and selectively boosts the suppressive activity of Tregs without broadly activating effector T cells, a mechanism explored for autoimmune indications such as rheumatoid arthritis. This biosimilar reproduces the target specificity of the originator and is built around the CD4 antigen rather than around a hybridoma clone. It is intended for functional and in-vitro applications: CD4 binding assays, epitope and competition studies, Treg activation readouts, and use as a reference or benchmarking control alongside other anti-CD4 reagents. Material is offered as low-endotoxin, research-grade protein suitable for bulk milligram-to-gram scale. It is not a clinical drug and is not intended for therapeutic or diagnostic use. Lot-specific characterization data are available on request. CD4 (UniProt P01730) is a single-pass type I transmembrane glycoprotein of the immunoglobulin superfamily, composed of four extracellular domains (D1-D4), and is expressed on helper and regulatory T cells, thymocytes, and subsets of monocytes and dendritic cells. As a co-receptor, CD4 binds MHC class II molecules on antigen-presenting cells and stabilizes the T-cell receptor interaction, recruiting the tyrosine kinase Lck through its cytoplasmic tail to nucleate proximal TCR signaling. This role makes CD4 central to helper T cell priming, cytokine production, and the maintenance of immune tolerance via regulatory T cells. CD4 is also the primary entry receptor for HIV-1. Tregalizumab targets a specific conformational epitope on CD4 domain 2, distinct from sites bound by conventional anti-CD4 antibodies, which underlies its selective, non-depleting activation of Treg suppressive function.

Other names: CD4, CD4mut, CD4 molecule, OKT4D, IMD79

Purification Method: This monoclonal antibody was purified using Protein A

Formulation: Sterile, preservative-free, solution in PBS. BSA and Azide free.

Purity: >90% by SDS-PAGE

Endotoxin: ≤ 1.0 EU/mg as determined by the LAL method

Storage: This biosimilar is stable when stored at 2-8°C. For longer term storage (> 3 months) it is recommended to store this antibody at -20°C or -70°C.

Applications: Functional Assays

Application Notes: This biosimilar is for research use only (RUO): it is not for diagnostic or therapeutic procedures and cannot be purchased by patients.



Use: Products are for research use only. Not for use in diagnostic or therapeutic procedures.

Delivery Time: 3-4 weeks