Metelimumab Biosimilar - Research Grade

Product Code: ICH5257

More Information

Species Reactivity: Human

Target: TGFB1

Concentration: >1mg/ml

Isotype: Human IgG4 - kappa

Host: CHO Cells

product name H2: Metelimumab Biosimilar - Research Grade

Antibodies against the same target: Fresolimumab Biosimilar - Research Grade (ICH5077), Linavonkibart Biosimilar - Research Grade (ICH5253), Cirevetmab Biosimilar - Research Grade (ICH5440), Nisevokitug Biosimilar - Research Grade (ICH5713)

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

Buffer: ICH3002

UniProt: P01137

Shipping Conditions: Blue ice

background: This product is an unconjugated, non-therapeutic recombinant analog of metelimumab, supplied strictly for research use. Metelimumab (originally developed as CAT-192) is a fully human IgG4/kappa antibody that was engineered to selectively neutralize the TGF-beta 1 isoform, and was investigated preclinically and clinically as an anti-fibrotic agent before development was discontinued. This research-grade analog reproduces the antigen-binding behavior of the originator against human TGF-beta 1 (UniProt P01137) without being formulated, tested, or intended for human or veterinary

use. It is useful as a defined, reproducible TGF-beta 1-neutralizing reagent for in-vitro and preclinical work: as a positive or benchmarking control in ligand-neutralization and reporter assays, for blocking TGF-beta 1 signaling in cell culture, for biosimilar/comparability and assay-development studies, and as a tool for ADCC/effector or antibody-engineering characterization. It is offered at low endotoxin (research grade less than 1 EU/mg; ultra-low-endotoxin option less than 0.5 EU/mg) and available in bulk milligram-to-gram quantities to support scale-up and reproducibility. It is not the clinical drug. Transforming growth factor beta 1 (TGF-beta 1, gene TGFB1; UniProt P01137) is a secreted, disulfide-linked homodimeric cytokine and the prototypic member of the TGF-beta superfamily. It is synthesized as a latent complex in which the mature growth factor remains non-covalently associated with its latency-associated peptide (LAP) and, via latent TGF-beta binding proteins, is stored in the extracellular matrix; activation by proteases, integrins (notably alpha-v-beta-6/beta-8), or mechanical force releases the active dimer. Active TGF-beta 1 signals through the type II (TGFBR2) and type I (TGFBR1/ALK5) serine-threonine kinase receptors, triggering SMAD2/3 phosphorylation and SMAD4-dependent transcription, alongside non-SMAD pathways. It is a master regulator of immune tolerance and Treg biology, extracellular-matrix deposition and fibrosis, epithelial-mesenchymal transition, wound healing, and context-dependent tumor suppression or promotion.

Other names: Transforming growth factor beta-1 proprotein, TGFB

Specificity: Detects human TGFB1

Purification Method: This monoclonal antibody was purified using Protein A

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

Purity: >95% 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: 4 weeks