Rovelizumab Biosimilar - Research Grade

Product Code: ICH5275

More Information

Species Reactivity: Human

Target: ITGAL, ITGB2

Concentration: >1mg/ml

Isotype: Human IgG4 - kappa

Host: CHO Cells

product name H2: Rovelizumab Biosimilar - Research Grade

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

Buffer: ICH3002

UniProt: P20701;P05107

Shipping Conditions: Blue ice

background: This product is a research-grade biosimilar of Rovelizumab (also known as Hu23F2G / LeukArrest), supplied as an unconjugated, non-therapeutic analog built around the same target specificity as the originator molecule. Rovelizumab was a humanized IgG4 monoclonal antibody developed as an anti-adhesion immunosuppressive agent, historically investigated in acute inflammatory settings such as hemorrhagic shock, myocardial infarction and stroke, where it was intended to blunt leukocyte-mediated tissue injury. The ichor.bio version is produced for research use only and is not the clinical drug; it is intended as a functional tool and reference standard rather than a therapeutic. It is offered as a human IgG4-kappa molecule and is manufactured to research-grade low endotoxin specifications (typically less than 1 EU/mg), with bulk milligram-to-gram quantities available to support in-vitro assays, reproducibility across experiments and comparative studies. As a biosimilar analog it carries no assigned hybridoma clone designation; its identity derives from its defined target reactivity and human IgG4 framework. Researchers commonly use

molecules of this type as binding, blocking and isotype-matched control reagents in leukocyte-adhesion and integrin-focused studies. Rovelizumab is directed against the beta-2 integrin CD18 (ITGB2, UniProt P05107), which pairs non-covalently with the alpha-L chain CD11a (ITGAL, UniProt P20701) to form LFA-1 (lymphocyte function-associated antigen-1, CD11a/CD18). LFA-1 is expressed across leukocytes, including T and B lymphocytes, monocytes, macrophages, neutrophils and basophils. Through binding to ICAM ligands (notably ICAM-1) on activated endothelium and antigen-presenting cells, LFA-1 mediates firm leukocyte adhesion, transendothelial migration to sites of inflammation, and lymphocyte homing and recirculation; it also contributes to immunological synapse formation. By engaging the shared CD18 subunit, an anti-LFA-1 antibody of this specificity blocks adhesion-dependent leukocyte trafficking and effector interactions, making the target central to inflammation, immune-cell recruitment and adhesion biology.

Other names: CD11 antigen-like family member A, Leukocyte adhesion glycoprotein LFA-1 alpha chain, LFA-1A, Leukocyte function-associated molecule 1 alpha chain, Cell surface adhesion glycoproteins LFA-1/CR3/p150 95 subunit beta, Complement receptor C3 subunit beta, In

Specificity: Detects human ITGAL, ITGB2

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