

Volociximab Biosimilar - Research Grade

Product Code: ICH5287

More Information

Species Reactivity: Human

Target: ITGA5

Concentration: >1mg/ml

Isotype: Human IgG4 - kappa

Host: CHO Cells

product name H2: Volociximab Biosimilar - Research Grade

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

Buffer: ICH3002

UniProt: P08648

Shipping Conditions: Blue ice

background: This product is a research-grade biosimilar of volociximab, supplied as an unconjugated, non-therapeutic analog intended for research use only. It is not the clinical drug and is not intended for diagnostic or therapeutic use. Volociximab is a chimeric/humanized monoclonal antibody directed against the alpha-5 subunit of the integrin alpha-5/beta-1 (VLA-5) fibronectin receptor. The biosimilar reproduces the target-binding specificity of the originator and is built around the ITGA5 (integrin alpha-5, UniProt P08648) target, formatted here as a human IgG4-kappa. It is intended for functional and in-vitro applications such as receptor-binding characterization, blockade of fibronectin engagement, competition and neutralization assays, and as a reference or isotype-matched control in comparability studies. Because it is offered at research grade with low endotoxin and can be supplied in bulk milligram-to-gram quantities, it suits assay development, screening cascades, and biosimilarity or lot-comparison work. As with any biosimilar reagent, users should confirm identity, binding activity, and suitability in their own

experimental system before drawing conclusions, and treat the material strictly as a research tool rather than a clinical product. The target is integrin alpha-5 (ITGA5, UniProt P08648), which pairs with integrin beta-1 (ITGB1) to form the alpha-5/beta-1 heterodimer, also known as VLA-5 and the classical fibronectin receptor. This integrin recognizes the Arg-Gly-Asp (RGD) motif of fibronectin and mediates cell adhesion to the extracellular matrix, transmitting bidirectional signals that regulate cell migration, survival, proliferation, and cytoskeletal organization. Alpha-5/beta-1 signaling is central to angiogenesis, and its expression on activated endothelium and in tumor stroma has made it a focus in oncology and vascular biology research. Volociximab binds the alpha-5/beta-1 complex and blocks fibronectin binding, providing a tool to interrogate integrin-dependent adhesion, matrix assembly, and angiogenic pathways in vitro. ITGA5 is a human target, which is relevant when planning cross-reactivity-dependent experiments.

Other names: CD49 antigen-like family member E, Fibronectin receptor subunit alpha, Integrin alpha-F, VLA-5, Integrin alpha-5, FNRA

Specificity: Detects human ITGA5

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