Vilamakitug Biosimilar - Research Grade

Product Code: ICH5284

More Information

Species Reactivity: Human

Target: IL1A

Concentration: >1mg/ml

Isotype: Human IgG4 - kappa

Host: CHO Cells

product name H2: Vilamakitug Biosimilar - Research Grade

Antibodies against the same target: Bermekimab Biosimilar - Research Grade (ICH5393)

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

Buffer: ICH3002

UniProt: P01583

Shipping Conditions: Blue ice

background: ICH5284 is a research-grade biosimilar of vilamakitug, supplied as an unconjugated, non-therapeutic analog of the originator antibody for research use only. Vilamakitug (also known as XB-2001) is a fully human IgG4-kappa monoclonal antibody directed against human interleukin-1 alpha (IL-1 alpha), and this biosimilar reproduces the originator's human IgG4-kappa framework and IL-1 alpha binding specificity so investigators can study the molecule outside of a clinical setting. It is intended for functional and in-vitro applications rather than patient treatment. The product is manufactured to research-grade endotoxin specifications (typically below 1 EU/mg) and is available in bulk milligram-to-gram quantities, making it suitable for reproducible neutralization assays, binding characterization, and use as a reference or control reagent. Because it is a target-based

biosimilar built around IL-1 alpha rather than a hybridoma-derived antibody, it is defined by its originator sequence and specificity rather than a clone designation. As with all ichor.bio biosimilars, this material is a research tool and is not a clinical drug product or a substitute for the marketed therapeutic. Interleukin-1 alpha (IL-1 alpha, gene IL1A; UniProt P01583) is a member of the IL-1 cytokine family and a proximal, potent pro-inflammatory mediator. It is constitutively present in epithelial and mesenchymal cells and, unlike IL-1 beta, is biologically active in both its precursor and processed forms. IL-1 alpha can act intracellularly, be released upon cell death or stress as an alarmin, or be presented on the cell surface, and it signals through the IL-1 receptor type 1 (IL-1R1) with the accessory protein IL-1RAcP to drive MyD88-dependent NF-kB and MAPK signaling. Downstream effects include induction of secondary cytokines, endothelial activation, leukocyte recruitment, and, in chronic settings, contributions to synovial and entheseal inflammation, osteoclast-mediated bone remodeling, and tissue damage. Its dual role in sterile inflammation and immune signaling makes IL-1 alpha a target of interest across inflammatory and oncology research.

Other names: IL-1 alpha, Hematopoietin-1, Interleukin-1 alpha, IL1F1

Specificity: Detects human IL1A

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