

Umesolerbart Biosimilar - Research Grade

Product Code: ICH5282

More Information

Species Reactivity: Human

Target: BETVIA

Concentration: >1mg/ml

Isotype: Human IgG4 - kappa

Host: CHO Cells

product name H2: Umesolerbart Biosimilar - Research Grade

Antibodies against the same target: [Atisnolerbart Biosimilar - Research Grade \(ICH5230\)](#), [Bremzalerbart Biosimilar - Research Grade \(ICH5231\)](#)

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

Buffer: ICH3002

Shipping Conditions: Blue ice

background: This product is a research-grade biosimilar of Umesolerbart, supplied as an unconjugated, non-therapeutic analog of the originator antibody for research use only. It is a recombinant Human IgG4 (kappa) antibody built around the birch pollen allergen Bet v 1-A (identifier BETVIA), the dominant sensitising allergen of Betula pendula and the antigen responsible for the majority of birch-driven type I hypersensitivity. Rather than acting on a human cell-surface receptor, the antibody binds the allergen itself and is intended to compete with and block allergen-specific IgE, mirroring the class of allergen-neutralising IgG4 antibodies explored as passive immunotherapy for birch pollen allergy. The IgG4 backbone is well suited to this role because it lacks strong effector (ADCC/complement) activity, so binding sequesters and neutralises the allergen without provoking effector-

mediated inflammation. This ichorbio material is manufactured to research-grade specifications with low endotoxin, offered at scale (bulk mg-g) and priced for in-vitro and functional research. It is not a clinical product and is not intended for diagnostic or therapeutic use. The originator drug name could not be independently verified and should be confirmed before publication. Bet v 1-A (BETVIA) is the major pollen allergen of European white birch (*Betula pendula*) and the prototype of the pathogenesis-related PR-10 protein family. It is a small (~17 kDa) cytosolic protein with a characteristic hydrophobic cavity that binds diverse ligands including plant steroids, flavonoids, fatty acids and cytokinins, consistent with a general lipid/steroid carrier function in the pollen grain. Clinically, Bet v 1 is the principal driver of birch pollen sensitisation: it is recognised by allergen-specific IgE on mast cells and basophils, cross-linking of which triggers degranulation and type I hypersensitivity. Its conserved fold also underlies pollen-food cross-reactivity syndromes with homologous PR-10 proteins in apple, hazelnut and other plant foods. Successful allergen immunotherapy is associated with a shift toward allergen-specific IgG4 that blocks IgE binding, which is the biological rationale for anti-Bet v 1 IgG4 antibodies.

Other names: Major pollen allergen Bet v 1-A

Specificity: Detects human BETVIA

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