

Polzastobart Biosimilar - Research Grade

Product Code: ICH5267

More Information

Species Reactivity: Human

Target: LILRB2

Concentration: >1mg/ml

Isotype: Human IgG4 - kappa

Host: CHO Cells

product name H2: Polzastobart Biosimilar - Research Grade

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

Buffer: ICH3002

UniProt: Q8N423

Shipping Conditions: Blue ice

background: This is a research-grade, unconjugated recombinant analog of polzastobart, an anti-LILRB2 antibody, supplied strictly for research use only and not for human or veterinary application. It reproduces the human IgG4-kappa format of the originator so investigators can study antagonism of the myeloid immune checkpoint LILRB2 (ILT4) in controlled settings. It is intended as a functional reagent: a binding and blocking tool, a positive control in ligand-competition and neutralisation assays, a reference standard for developing anti-LILRB2 detection or ADC workflows, and an input for preclinical in-vitro pharmacology. Because it is built around the target rather than reverse-engineered from a clinical lot, it is best described as a non-therapeutic biosimilar analog and not the clinical drug. It is manufactured at research quality with low endotoxin (research grade 1 EU/mg; ultra-low 0.5 EU/mg) and is available in bulk milligram-to-gram quantities to support assay development, screening cascades, and comparator work. No clone identity is implied or characterised here. LILRB2 (leukocyte immunoglobulin-like receptor B2; also ILT4, LIR-2,

CD85d; UniProt Q8N423) is an inhibitory receptor expressed mainly on myeloid cells including monocytes, macrophages, dendritic cells, and neutrophils. Its extracellular immunoglobulin-like domains bind ligands such as classical and non-classical HLA class I molecules (including HLA-G), and it also engages angiopoietin-like proteins and, notably, oligomeric beta-amyloid. Ligand binding signals through cytoplasmic ITIMs that recruit SHP-1/SHP-2 phosphatases, dampening activating signals and promoting immunosuppressive, tolerogenic myeloid states. In cancer, LILRB2 engagement is associated with tumour-associated macrophage polarisation toward an immunosuppressive phenotype and reduced antigen presentation, making it a myeloid checkpoint target. Antagonising LILRB2 is studied as a way to reprogram myeloid cells toward pro-inflammatory, anti-tumour activity, often in combination with T-cell-directed checkpoint blockade.

Other names: LIR-2, Leukocyte immunoglobulin-like receptor 2, CD85 antigen-like family member D, Immunoglobulin-like transcript 4, ILT-4, Monocyte/macrophage immunoglobulin-like receptor 10, MIR-10, Leukocyte immunoglobulin-like receptor subfamily B member 2

Specificity: Detects human LILRB2

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