

Perenostobart Biosimilar - Research Grade

Product Code: ICH5265

More Information

Species Reactivity: Human

Target: ENTPD1

Concentration: >1mg/ml

Isotype: Human IgG4 - kappa

Host: CHO Cells

product name H2: Perenostobart Biosimilar - Research Grade

Antibodies against the same target: [IPH5201 Biosimilar - Research Grade \(ICH5218\)](#), [Eurestobart Biosimilar - Research Grade \(ICH5537\)](#)

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

Buffer: ICH3002

UniProt: P49961

Shipping Conditions: Blue ice

background: This product is an unconjugated, non-therapeutic recombinant analog of Perenostobart, a monoclonal antibody directed against human ENTPD1 (CD39). It reproduces the antigen-binding specificity of the originator drug in a research-grade format built around the ENTPD1 target, supplied as a human IgG4-kappa protein for research use only. It is not the clinical drug and is not intended for human or veterinary use. The analog is useful as a well-defined, target-specific reagent for in-vitro and preclinical work: as a positive control or benchmarking tool in CD39 binding and enzyme-inhibition assays, for characterizing anti-CD39 antibody panels, for studying the adenosinergic axis in immuno-

oncology models, and as a reference standard in ADCC/ADC development and comparability testing. It is offered as low-endotoxin, bulk material (research grade typically less than 1 EU/mg, ultra-low grade less than 0.5 EU/mg) available at milligram-to-gram scale to support cell-based assays, plate-binding formats, and preclinical model work. Lot consistency and defined isotype make it suitable for repeated, quantitative experiments where a stable, characterized anti-ENTPD1 reagent is required. ENTPD1, better known as CD39 (ectonucleoside triphosphate diphosphohydrolase-1; UniProt P49961), is a plasma-membrane ectoenzyme that hydrolyzes extracellular ATP and ADP to AMP. Acting upstream of CD73 (which converts AMP to adenosine), CD39 is the rate-limiting step of the adenosinergic pathway that shifts the extracellular milieu from pro-inflammatory ATP toward immunosuppressive adenosine. It is expressed on regulatory T cells, B cells, myeloid cells, endothelium, and many tumor and stromal cells. By depleting pro-inflammatory eATP and generating substrate for adenosine production, CD39 dampens effector T-cell and NK-cell responses, promotes an immunosuppressive tumor microenvironment, and contributes to angiogenesis and thromboregulation. Because of this role, CD39 is a prominent target in immuno-oncology, where blocking its enzymatic activity aims to restore anti-tumor immunity by preserving eATP and limiting adenosine accumulation.

Other names: ATP diphosphohydrolase, ATP-DPH, ATPDase, Ecto-ATP diphosphohydrolase 1, Ecto-ATPDase 1, Ecto-ATPase 1, Ecto-apyrase, Lymphoid cell activation antigen, Nucleoside triphosphate diphosphohydrolase 1, NTPDase1, Ectonucleoside triphosphate diphosphohydrolase

Specificity: Detects human ENTPD1

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