

YR0004

Leader in Biomolecular Solutions for Life Science



Human IL-5 Monoclonal Antibody

Catalog No.: YR0004

Basic Information

Molecular Weight

150 kDa

Endotoxin

<1EU/mg (<0.001EU/μg) Determined by LAL gel clotting assay

Sterility

0.2 μm filtration

Aggregation

<5% Determined by SECP

Purity

>95% Determined by SDS-PAGE

Background

Mepolizumab is a humanized IgG1 k anti-IL5 monoclonal antibody. IL-5 is a key cytokine required for the maturation, activation, proliferation and survival of eosinophils making it an ideal target for therapeutic management of eosinophil levels in respiratory indications. Mechanistically, mepolizumab exerts its therapeutic function as an IL-5 antagonist to reduce eosinophil levels in the blood. IL-5 is 134-amino acid 52 kDa homodimeric protein with a four-helix domain. Mepolizumab specifically binds to the alpha -chain of IL-5, resulting in two IL-5 dimers being cross-linked by two molecules of mepolizumab. The highly specific binding of mepolizumab to IL-15 blocks ligation to IL-5Aa receptor. The biologic is primarily used for the management of moderate to severe asthma. Bio-Techne's Leronlimab biosimilar is produced using the full-length sequence which is identical to that of the original therapeutic antibody.

Reported Applications

ELISA, neutralization, functional assays such as bioanalytical PK and ADA assays, and those assays for studying biological pathways

Immunogen Information

Clone

Mepolizumab Biosimilar

Isotype

Human IgG1 kappa

Immunogen

Recommended Isotype Control(s)

Recommended Dilution Buffer

1×PBS pH 7.3

Contact



www.abclonal.com

Product Information

Production

Purified from cell culture supernatant in an animal-free facility

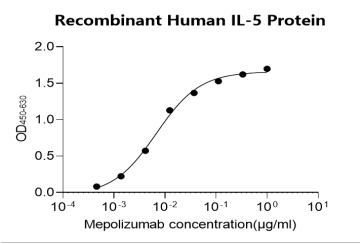
Purification

Protein A or G purification

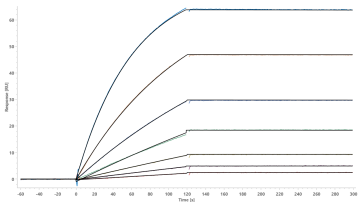
Storage

Store at 2 - 8°C. 2 - 8°C for up to 4 weeks and -80°C for long term storage (Avoid repeated freezing and thawing)

Validation Data



Direct ELISA binding curve demonstrating the recognition of Human Anti-Human IL-5 (Research Grade Mepolizumab Biosimilar) Monoclonal Antibody to IL-5. The target protein was coated onto the microplate well surface, followed by binding of the antibody. A donkey anti-human IgG HRP conjugate was used for detection.



Human IL-5 SPR assay. Determined through SPR assay, the Human Anti-Human IL-5 (Research Grade Mepolizumab Biosimilar) Monoclonal Antibody is capable of binding to Human IL-5 with an affinity constant of 44.49 pM.