

# Cynomolgus IL-23A & Human IL-12B Heterodimer Protein; His Tag

## Product Information

**Product Name** Cynomolgus IL-23A & Human IL-12B Heterodimer Protein; His Tag

**Storage temp.** Store at  $\leq -70^{\circ}\text{C}$ , stable for 6 months after receipt.  
Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

**Catalog# / Size** GM-88027RP-100 / 100  $\mu\text{g}$   
GM-88027RP-1000 / 1 mg

## Protein Information

**Alternative Names** IL-23 alpha & IL-12 beta Heterodimer

**Source** Cynomolgus IL-23A & Human IL-12B Heterodimer Protein; His Tag (GM-88027RP) is expressed from human 293 cells (HEK-293). It contains AA(Cynomolgus IL-23A) Val 22 - Pro 189 (Accession # G7PIH8) and AA(Human IL-12B) Ile 23 - Ser 328 (Accession # P29460-1).  
This protein carries a His tag at the C-terminus of Human IL-12B.

**Purity** > 90% as determined by SDS-PAGE

**Endotoxin** < 1 EU/ $\mu\text{g}$ , determined by LAL gel clotting assay

**Predicted Mol Mass** 18.5 KDa (IL-23A) and 34.4 KDa (IL-12B)

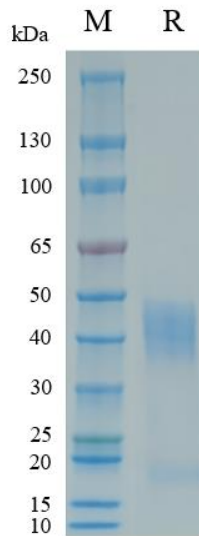
**Formulation** Supplied as a 0.2  $\mu\text{m}$  filtered solution of PBS, pH7.2-7.4.

**Description** IL-23 is a heterodimeric cytokine made of IL-23 alpha (p19) and IL-12 beta (p40) subunits. While p40 is shared with IL-12, p19 is unique to IL-23. It binds to its receptor complex (IL-23R and IL-12R $\beta$ 1) to regulate Th17 cells, promoting the release of pro-inflammatory cytokines like IL-17 and IL-22, driving immune inflammation.

IL-23 plays a significant role in many inflammatory and autoimmune diseases, such as psoriasis, Crohn's disease, ulcerative colitis, and rheumatoid arthritis. Due to its regulation of Th17 cells and inflammatory responses, IL-23 has become an important therapeutic target. Drugs that specifically block p19 (e.g., guselkumab) have been used to treat various inflammatory diseases. Additionally, p40-targeting drugs (e.g., ustekinumab) can inhibit the functions of both IL-12 and IL-23, thereby alleviating disease progression.

Version:4.0

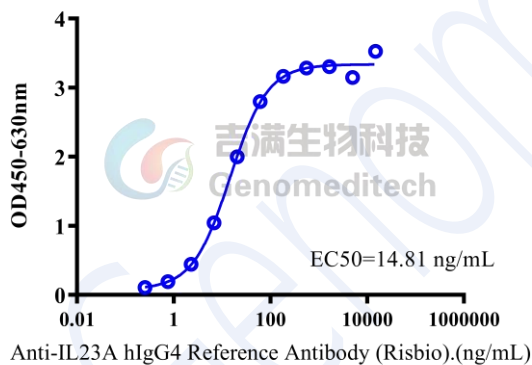
## SDS-PAGE



On SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

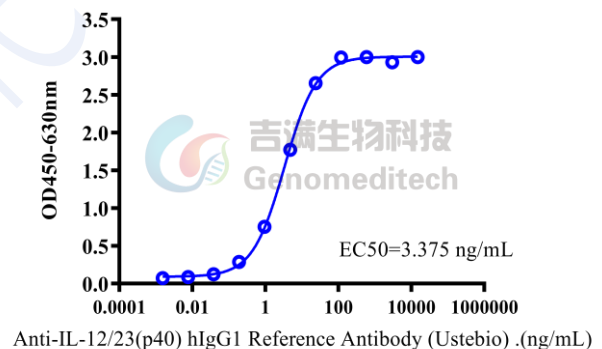
## Bioactivity-ELISA

**Bioactivity-ELISA**  
0.6 µg Anti-His mIgG2a Antibody +  
0.2 µg Cynomolgus IL-23A & human IL-12B Heterodimer  
Protein; His Tag of per well



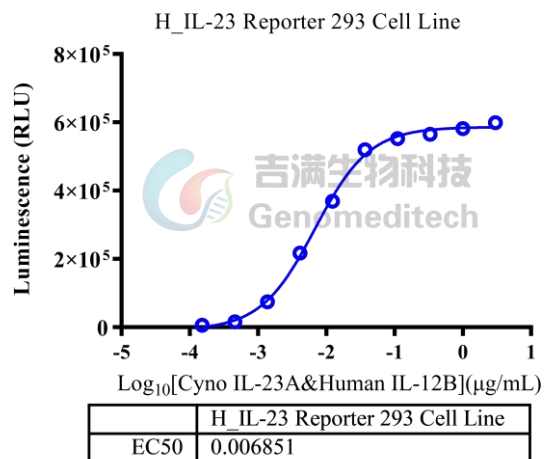
Cynomolgus IL-23A & Human IL-12B Heterodimer Protein; His Tag (Catalog # GM-88027RP) was immobilized at 2 µg/ml (100 µL/well) on Anti-His mIgG2a Antibody (Catalog # GM-59493AB) (0.6 µg/well) precoated. Increasing concentrations of Anti-IL23A hIgG4 Reference Antibody (Risbio) (Catalog # GM-88013MAB) were added.

**Bioactivity-ELISA**  
0.2 µg Cynomolgus IL-23A & human IL-12B Heterodimer  
Protein; His Tag of per well



Cynomolgus IL-23A & Human IL-12B Heterodimer Protein; His Tag (Catalog # GM-88027RP) was immobilized at 2 µg/ml (100 µL/well). Increasing concentrations of Anti-IL-12/23(p40) hIgG1 Reference Antibody (Ustebio) (Catalog # GM-87870MAB) were added.

## Bioactivity CELL BASE



Cynomolgus IL-23A & Human IL-12B Heterodimer Protein;  
 His Tag (Catalog # GM-88027RP) was added into H\_IL-23  
 Reporter 293 Cell Line (Catalog # GM-C06722), and then IL-  
 23/IL-23R signals were stimulated.