

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

## Product Information

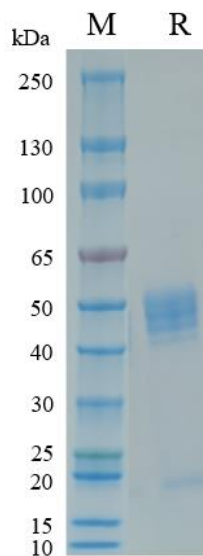
<b>Product Name</b>	Mouse IL-23A&IL-12B Heterodimer Protein; His Tag
<b>Storage temp.</b>	Store at $\leq -70^{\circ}\text{C}$ , stable for 6 months after receipt. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.
<b>Catalog# / Size</b>	<b>GM-88028RP-100 / 100 <math>\mu\text{g}</math></b> <b>GM-88028RP-1000 / 1 mg</b>

## Protein Information

<b>Alternative Names</b>	IL-23 alpha & IL-12 beta Heterodimer
<b>Source</b>	Mouse IL-23A&IL-12B Heterodimer Protein; His Tag (GM-88028RP) is expressed from human 293 cells (HEK-293). It contains AA(IL-23A) Val 22 - Ala 196 (Accession # Q9EQ14-1) and AA(IL-12B) Met 23 - Ser 335 (Accession # P43432-1).  This protein carries a His tag at the C-terminus of IL-12B.
<b>Purity</b>	> 90% as determined by SDS-PAGE
<b>Endotoxin</b>	< 1 EU/ $\mu\text{g}$ , determined by LAL gel clotting assay
<b>Predicted Mol Mass</b>	19.3 KDa (IL-23A) and 36.9 KDa (IL-12B)
<b>Formulation</b>	Supplied as a 0.2 $\mu\text{m}$ filtered solution of PBS, pH7.2-7.4.
<b>Description</b>	<p>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<math>\beta</math>1) to regulate Th17 cells, promoting the release of pro-inflammatory cytokines like IL-17 and IL-22, driving immune inflammation.</p> <p>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.</p>

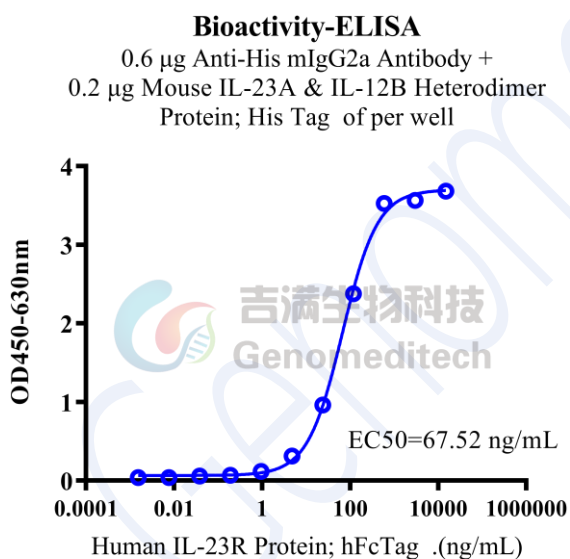
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## SDS-PAGE



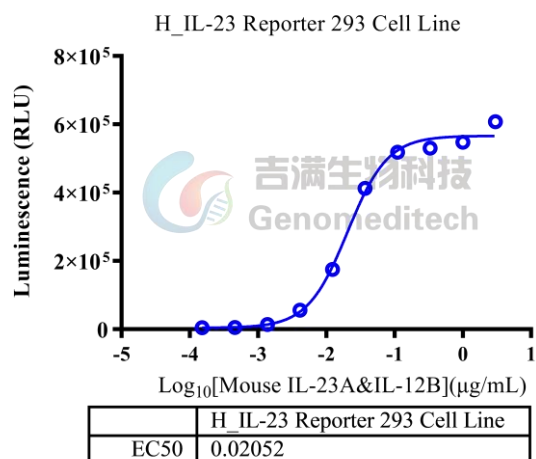
On SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

## Bioactivity-ELISA



Mouse IL-23A&IL-12B Heterodimer Protein; His Tag (Catalog # GM-88028RP) was immobilized at 2  $\mu$ g/ml (100  $\mu$ L/well) on Anti-His mIgG2a Antibody (Catalog # GM 59493AB) (0.6  $\mu$ g/well) precoated. Increasing concentrations of Human IL-23R Protein; hFc Tag (Catalog # GM-87925RP) were added.

## Bioactivity CELL BASE



Mouse IL-23A&IL-12B Heterodimer Protein; His Tag  
 (Catalog # GM-88028RP) was added into H\_IL-23 Reporter  
 293 Cell Line (Catalog # GM-C06722), and then IL-23/IL-  
 23R signals were stimulated.