Genomeditech (Shanghai) Co.,Ltd.
Order: 021-68455258/50432826/50432825
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Human IL-23A & Mouse IL-12B Heterodimer Protein; His Tag

Product Information

Product Name	Human IL-23A & Mouse IL-12B Heterodimer Protein; His Tag
Storage temp.	Store at ≤ -70℃, 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-88029RP-100 / 100 μg** **GM-88029RP-1000 / 1 mg**

Protein Information

Alternative Names	IL-23 alpha & IL-12 beta Heterodimer
Source	Human IL-23A & Mouse IL-12B Heterodimer Protein; His Tag (GM-88029RP) is expressed from human 293 cells (HEK-293). It contains AA(Human IL-23A) Arg 20 - Pro 189 (Accession # Q9NPF7-1) and AA(Mouse IL-12B) Met 23 - Ser 335 (Accession # P43432-1). This protein carries a His tag at the C-terminus of Mouse IL-12B.
Purity	> 90% as determined by SDS-PAGE
Endotoxin	< 1 EU/μg, determined by LAL gel clotting assay
Predicted Mol Mass	18.7 KDa (IL-23A) and 36.9 KDa (IL-12B)
Formulation	Supplied as a 0.2 μm 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-12Rβ1) 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.

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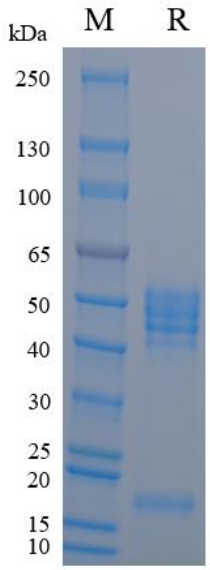
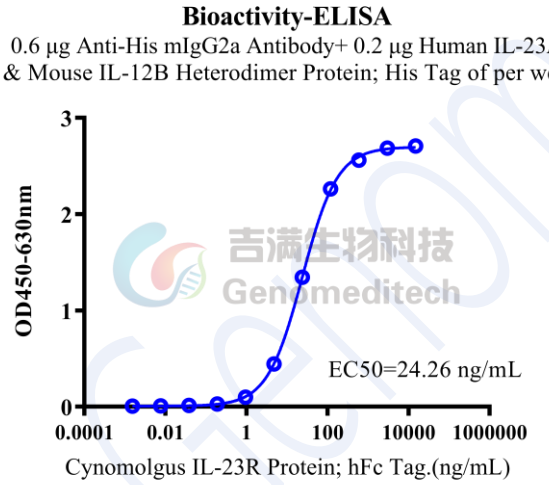
SDS-PAGE

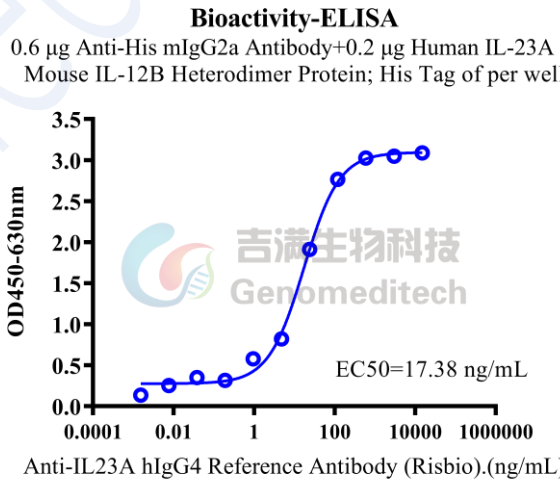


On SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-ELISA

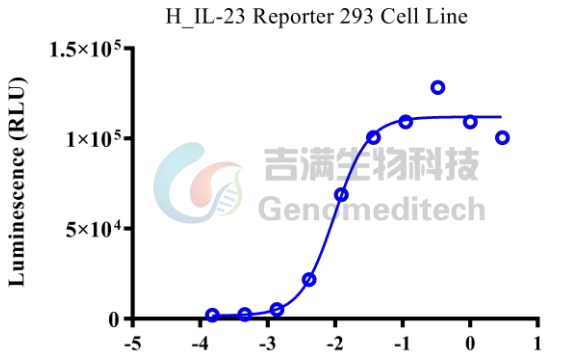


Human IL-23A & Mouse IL-12B Heterodimer Protein; His Tag (Catalog # GM-88029RP) was immobilized at 2 μg/ml (100 μL/well) on Anti-His mIgG2a Antibody (Catalog # GM-59493AB) (0.6 μg/well) precoated. Increasing concentrations of Cynomolgus IL-23R Protein; hFc Tag (Catalog # GM-88022RP) were added.



Human IL-23A & Mouse IL-12B Heterodimer Protein; His Tag (Catalog # GM-88029RP) 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 CELL BASE



	H_IL-23 Reporter 293 Cell Line
EC50	0.009706

Human IL-23A & Mouse IL-12B Heterodimer Protein; His Tag (Catalog # GM-88029RP) was added into H_IL-23 Reporter 293 Cell Line (Catalog # GM-C06722), and then IL-23/IL-23R signals were stimulated.