

Biotinylated Human IL-23A&IL-12B Heterodimer Protein; His-Avi Tag

Product Information

Product Name Biotinylated Human IL-23A&IL-12B Heterodimer Protein; His-Avi 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-88026RP-25 / 25 μg
GM-88026RP-200 / 200 μg

Protein Information

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

Source Biotinylated Human IL-23A&IL-12B Heterodimer Protein; His-Avi Tag (GM-88026RP) is expressed from human 293 cells (HEK-293). It contains AA(IL-23A) Arg 20 - Pro 189 (Accession # Q9NPF7-1) and AA(IL-12B) Ile 23 - Ser 328 (Accession # P29460-1).

This protein carries a His-Avi tag at the C-terminus of IL-12B.

Purity > 95% as determined by SDS-PAGE

Endotoxin < 1 EU/ μg , determined by LAL gel clotting assay

Predicted Mol Mass 18.7 KDa (IL-23A) and 36.2 KDa (IL-12B)

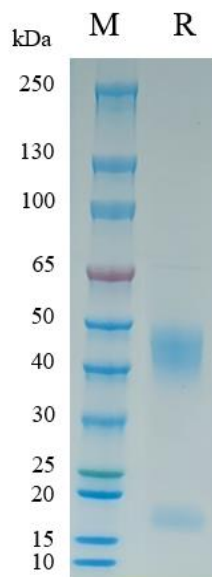
Formulation Supplied as a 0.2 μm filtered solution of PBS, pH7.2-7.4.

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-12R β 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

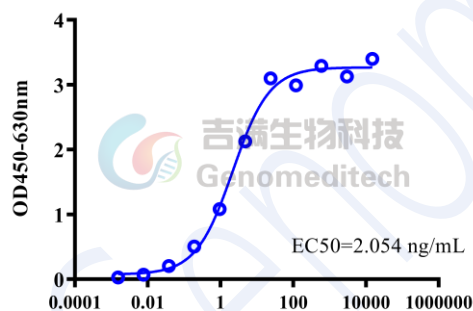
SDS-PAGE



On SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA

Bioactivity-ELISA
0.2 μ g Biotinylated Human IL-23A&IL-12B Heterodimer Protein; His-Avi Tag of per well



Anti-IL-12/23(p40) hIgG1 Reference Antibody (Ustebio) (ng/mL)

Biotinylated Human IL-23A&IL-12B Heterodimer Protein;
His-Avi Tag (Catalog # GM-88026RP) was immobilized at 2 μ g/ml (100 μ L/well) on streptavidin precoated. Increasing concentrations of Anti-IL-12/23(p40) hIgG1 Reference Antibody (Ustebio) (Catalog # GM-87870MAB) were added.