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

**Product Information**

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| **Product Name** | Cynomolgus IL-23A & Human IL-12B Heterodimer Protein; His Tag |
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| **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. |
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| **Catalog# / Size** | **GM-88027RP-100 / 100 μg** |
| **GM-88027RP-1000 / 1 mg** |

**Protein Information**

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| **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/μg, 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 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** |  |
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| 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** |  |
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| 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. | 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** |  |
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| 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. |  |