

Product datasheet for **AR31172PU-N**

Interleukin-12 alpha / IL12A Human Protein

Product data:

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| Product Type: | Recombinant Proteins |
| Description: | Interleukin-12 alpha / IL12A human recombinant protein, 10 µg |
| Species: | Human |
| Expression Host: | CHO |
| Expression cDNA Clone or AA Sequence: | <p>p35 Subunit: RNLPVA TPDPGMFPCL HHSQNLLRAV SNMLQKARQT LEFYPCTSEE IDHEDITKDK TSTVEACLPL ELTKNESCLN SRETSFITNG SCLASRKTSF MMALCLSSII EDLKMYQVEF KTMNAKLLMD PKRQIFLDQN MLAVIDELMQ ALNFNSETVP QKSSLEEPDF YKTKIKLCL LHAFRIRAVT IDRVMSYLNA S</p> <p>p40 Subunit: IWELKK DVYVVELDWY PDAPGEMVWL TCDTPEEDGI TWTLDQSSEV LGSGKTLTIQ VKEFGDAGQY TCHKGGEVLS HLLLLLHKKE DGIWSTDILK DQKEPKNKTFR LRCEAKNYSGRFTCWLLTTI STDLTFSVKS SRGSSDPQGV TCGAATLSAE RVRGDNKEYE YSVECQEDSA CPAAEESLPIE VMVDAVHKL KYENYTSSFF IRDIKPDPP KNLQLKPLKN SRQVEVSWEY PDTWSTPHSY FSLTFCVQVQ GKSKREKKDR VFTDKTSATV ICRKNASISV RAQDRYYSSS WSEWASVPCS</p> |
| Predicted MW: | 75 kDa |
| Purity: | >98% by SDS-PAGE and HPLC |
| Buffer: | Presentation State: Purified State: Lyophilized purified protein Stabilizer: None |
| Bioactivity: | Biological: The ED50 was determined by the induction of IFN-γ from NK cells co-stimulated with IL-18 is ≤ 1.0 ng/ml, corresponding to a specific activity of ≥ 1 × 10 ⁶ units/mg. |
| Endotoxin: | < 0.1 ng per µg of IL-12 |
| Reconstitution Method: | Restore in 1x PBS, pH 7.2-7.4 to a concentration of 0.2 mg/ml. This solution can then be diluted into other aqueous buffers and stored at 4°C for 1 week or -20°C for future use. |
| Preparation: | Lyophilized purified protein |
| Protein Description: | Recombinant Human IL-12 is a 75.0 kDa heterodimeric glycoprotein consisting of disulfide-linked 35 kDa (p35) and 40 kDa (p40) subunits (503 total amino acid residues). |



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| Storage: | Store lyophilized at 2-8°C for 6 months or at -20°C long term. After reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C long term. Avoid repeated freezing and thawing. |
| Stability: | Shelf life: one year from despatch. |
| RefSeq: | NP_000873 |
| Locus ID: | 3592 |
| UniProt ID: | P29459 |
| Cytogenetics: | 3q25.33 |
| Synonyms: | IL-12A, IL-12 subunit p35, NKSF1, CLMF p35 |
| Summary: | This gene encodes a subunit of a cytokine that acts on T and natural killer cells, and has a broad array of biological activities. The cytokine is a disulfide-linked heterodimer composed of the 35-kD subunit encoded by this gene, and a 40-kD subunit that is a member of the cytokine receptor family. This cytokine is required for the T-cell-independent induction of interferon (IFN)-gamma, and is important for the differentiation of both Th1 and Th2 cells. The responses of lymphocytes to this cytokine are mediated by the activator of transcription protein STAT4. Nitric oxide synthase 2A (NOS2A/NOS2) is found to be required for the signaling process of this cytokine in innate immunity. [provided by RefSeq, Jul 2008] |
| Protein Families: | Druggable Genome, Secreted Protein |
| Protein Pathways: | Allograft rejection, Cytokine-cytokine receptor interaction, Jak-STAT signaling pathway, RIG-I-like receptor signaling pathway, Toll-like receptor signaling pathway, Type I diabetes mellitus |