Recombinant Rat IL12 protein, His-tagged

Cat. No. IL12-26R **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Rat Interleukin-12 is produced in Mammalian expression system and the target gene encoding Met23-Ser335(p40)&Arg23-Ser215(p35) is expressed with a 6His tag at the C-terminus.
Species	Rat
Source	Mammalian Cells
ProteinLength	23-335;23-215 a.a.
Description	Interleukin 12 (IL-12) is the founding member of the IL-12 family of heterodimeric cytokines, which have important immunological functions. IL-12 is composed of two disulfide-linkedsubunits of 35 kDa and 40 kDa, respectively. The 35 kDa subunit (p35) is an α-helical protein homologous to IL-6 and GCSF.The 40 kDa subunit(p40) contains one fibronectin type III and one Ig C2-like domain, and has a high degree of structural homology to type I cytokine receptors. Whereas p35 subunit is unique to IL-12,the p40 subunit is also utilized in IL-23.Mature rat p35 is a 194 amino acids (aa) protein that is secreted as a heterodimer linked to p40. It contains three potential N-linked glycosylation sites and shares 86%, and 58% aa sequence identity with mouse and human p35, respectively. Mature rat p40 contains 313 aa and can exist in multiple forms, including monomer, homodimer, heterodimer linked to p19 (forming IL23), and heterodimer linked to p35 (forming IL-12). IL12 facilitates hematopoietic stem cell proliferation, induces NK cell proliferation, and potentiates the expansion and late activation of Th1 CD4+ T cells.

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

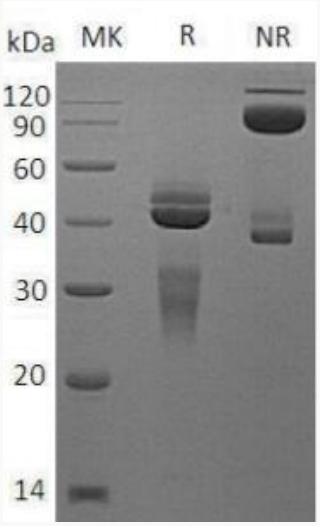
Form	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4.
AA Sequence	MWELEKDVYVVEVDWRPDAPGETVTLTCDSPEEDDITWTSDQRRGVIGSGKTLTIT VREFLDAGQYTCHRGGETLSHSHLLLHKKENGIWSTEILKNFKNKTFLKCEAPNYSG RFTCSWLVHRNTDLKFNIKSSSSSPESRAVTCGRASLSAEKVTLNQRDYEKYSVAC QEDVTCPTAEETLPIELVVEAQQQNKYENYSTSFFIRDIIKPDPPKNLQVKPLKNSQV EVSWEYPDSWSTPHSYFSLKFFVRIQRKKEKTKETEEECNQKGAFLVEKTSAEVQC KGANICVQAQDRYYNSSCSKWTCVPCRGRSHHHHHH&RVIPVSGPAKCLNQSQNL LKTTDDMVRTAREKLKHYSCTAGDIDHEDITRDKTSTLEACLPLELHKNESCLATKET SSIIRGSCLPPQKTSLMMTLCLGSIYEDLKMYQSEFQAINAALQSHNHQQITLDRNML MAIDELMRSLNHSGETLHQKAPMGEADPYRVKMKLCILLHAFSTRVMTINRVMNYLS SSHHHHHH
Endotoxin	Less than 0.1 ng/ɡ (1 IEU/ɡ) as determined by LAL test.
Purity	Greater than 95% as determined by reducing SDS-PAGE.
Storage	Lyophilized protein should be stored at < -20 centigrade, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7 centigrade for 2-7 days. Aliquots of reconstituted samples are stable at < -20 centigrade for 3 months.
Reconstitution	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 μg/ml. Dissolve the lyophilized protein in ddH2O. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

GENE INFORMATION

Gene Name	interleukin 12A [Rattus norvegicus]

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Official Symbol	IL12A
Synonyms	Interleukin-12; IL-12; IL12A
Gene ID	84405
mRNA Refseq	NM_053390.1
Protein Refseq	NP_445842.1
UniProt ID	Q9R103



Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA