

32-1474: IL 17 A/F Recombinant Protein

Alternative Name : IL17A/F, IL17 A/F, IL-17A/F, IL-17 A/F, IL17AF, IL-17 AF, Interleukin-17 A/F, Interleukin-17 AF.

Description

Source : Escherichia Coli. IL-17A/F Human Recombinant produced in E.Coli is a heterodimeric, non-glycosylated polypeptide chain containing 1 monomeric subunit of each IL-17A & IL-17F. The active dimer contains 271 amino acids and having a total molecular mass of 30.7 kDa. The IL-17A/F Human is purified by proprietary chromatographic techniques. Human IL-17A/F is a 40kDa glycoprotein which is secreted as a disulfide-linked heterodimer. IL-17A/F consists of two proteins of the IL-17 family, IL-17A and IL17F. Proteins of the 6 homodimeric IL17 family show a cysteine knot motif that contains two disulfide-bonds. Human IL17A is produced as a 155 a.a precursor that includes a 23 amino acids signal sequence and a 132 amino acid chain that includes an N-linked glycosylation site. Human IL17F is produced as a 153 amino acid precursor with a 20 amino acid signal sequence and a 133 amino acid region. Similar to IL17A, IL17F also has an N-linked glycosylation site. Both proteins (IL17A & IL17F) share 50% amino acid sequence identity. Human IL17A & IL17F show approximately 60% homology in their amino acid sequence to mouse IL-17A and IL-17F. Interleukin-17A/F and IL17A, IL17F homodimers are manufactured by activated CD4+ T cells, called Th17. IL-23 causes Th17 lymphocytes to manufacture IL-17A/F. IL17RA and IL17RC form a heterodimer for the binding of IL17A and IL17F. IL-17A/F binds IL-17RA. Interleukin-17A/F induces chemokine production and airway neutrophilia with intermediate potency between IL17A (most potent) and IL17F (least potent).

Product Info

Amount :	10 µg
Purification :	Greater than 98.0% as determined by SDS-PAGE.
Content :	Lyophilized from a concentrated (1mg/ml) solution containing no additives.
Storage condition :	Lyophilized Human IL-17A/F although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Human IL-17A/F should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.
Amino Acid :	MIVKAGITIP RNP GCPNSED KNFPRTVMVN LNIHNRNTNT NPKRSSDYNN RSTSPWNLHR NEDPERYPSV IWEAKCRHLG CINADGNVDY HMNSVPIQQE ILVLRREPPH CPNSFRLEKI LVS VGCTCVT PIVHHVA. MRKIPKVGHT FFQKPESCPP VPGGSMKLDI GIINENQRVS MSRNIESRST SPWNYTVTWD PNRYPSEVVQ AQCRNLGCIN AQGKEDISMN SVPIQQETLV VRRKHQGCSV SFQLEKVLVT VGCTCVTPVI HHVQ.

Application Note

It is recommended to reconstitute the lyophilized Interleukin Human IL-17A/F in sterile water at 0.1mg/ml, which can then be further diluted to other aqueous solutions. The activity as determined by production of IL-6 from mouse 3T3 cells is 3.2ng/ml (3.1x10⁵units/mg).

