

## Product datasheet for **TP728237L**

### Recombinant IL-12 (p70) (Interleukin-12 p70), Human, HEK293

#### Product data:

<b>Product Type:</b>	Recombinant Proteins
<b>Description:</b>	Recombinant IL-12 (p70) (Interleukin-12 p70), Human, HEK293
<b>Species:</b>	Human
<b>Expression Host:</b>	HEK293
<b>Expression cDNA Clone or AA Sequence:</b>	IWELKKDVYVVELDWYPDAPGEMVLTCDTPEEDGITWTL DQSSEVLGSGKTLTIQVKEFGDAGQYTCHK GGEVLSHSLLLLHKKEDGIWSTDILKDQKEPKNKTLRCEAKNYSGRFTCWWLTTISTDLTFSVKSSRGSSD PQGVTCGAATLSAERVRGDNKEYEYSVECQEDSACPAAEESLPIEVMVDAVHKLKYENYSSFFIRDIIPDP PKNLQLKPLKNSRQVEVSWEYPDTWSTPHSYFSLTFCVQVQGKSKREKDRVFTDKTSATVICRKNASISV RAQDRYSSSWSEWASVPCSGSTSGSGKPGSGEGSTKGRNLPVATPDPGMFPLHHSQNLLRAVSNML QKARQTLFYPCTSEEDHEDITKDKTSTVEACLPLELTKNESCLNSRETSFITNGSCLASRKTSFMMALCLSS IYEDLKMVQVEFKTMNAKLLMDPKRQIFLDQNMFLAVIDELMQALNFNSETVPQKSSLEEPDFYKTKIKLCI LLHAFRIRAVTIDRVMSYLNASHHHHHH with polyhistidine tag at the C-terminus.
<b>Tag:</b>	His Tag (C-term)
<b>Predicted MW:</b>	The protein has a calculated MW of 59.55 kDa. The protein migrates as 63-75 kDa under reducing condition (SDS-PAGE analysis).
<b>Purity:</b>	>98% as determined by SDS-PAGE.
<b>Buffer:</b>	The protein was lyophilized from a 0.2 µm filtered solution containing 1X PBS, pH 7.4.
<b>Bioactivity:</b>	Measure by its ability to induce IFN gamma secretion in PHA-activated human peripheral blood lymphocytes (PBMC). The ED <sub>50</sub> for this effect is 0.05-0.2 ng/mL.
<b>Endotoxin:</b>	<0.1 EU per 1 µg of the protein by the LAL method.
<b>Reconstitution Method:</b>	Centrifuge at 3000 rpm for 5 mins before opening. It is recommended to reconstitute the lyophilized protein in sterile H <sub>2</sub> O to a concentration not less than 100 µg/mL and incubate the stock solution at room temperature for at least 20 mins to ensure sufficient re-dissolved. Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.
<b>Applications:</b>	Cell culture
<b>Storage:</b>	Lyophilized protein should be stored at -20°C for 1 year. Upon reconstitution, store at 2°C to 8°C for up to 1 week. Further dilute in a buffer containing a carrier protein or stabilizer (e.g. 0.1% BSA, 10%FBS, 5%HSA or 5% trehalose solution), protein aliquots should be stored at -20°C or -80°C for 3-6 months. Avoid repeated freeze/thaw cycles.



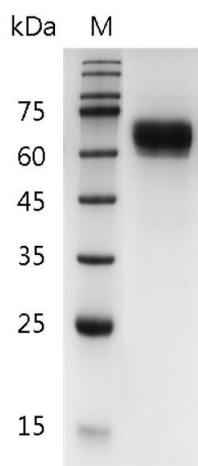
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UniProt ID: [P29459](#)

Synonyms: Interleukin-12, NKSF, Cytotoxic Lymphocyte Maturation Factor (CLMF), TSF

Summary: Interleukin 12 p70 (IL-12 p70) is an interleukin which is major secreted from immune cells like dendritic cells, macrophages and neutrophils. IL-12 p70 is a 58.5 kDa protein containing 527 amino acid residues which is composed by two subunits (IL-12 p35 and IL-12 p40). IL-12 p70 induces the cytotoxic activity of immune cells like NK cells and T cells. IL-12 p70 binds its receptor (IL-12R $\beta$ 1 and IL-12R $\beta$ 2) that activates the Jak/STAT signaling pathway. IL-12 p70 also plays an important role in cancer model which inhibits the formation of new blood vessels through the production of IFN  $\gamma$ .

### Product images:



SDS- PAGE analysis of recombinant human IL-12 p70