

BACKGROUND

The p28 subunit of IL-27 (IL-27/p28), also known as Interleukin-30 (IL-30), is a member of the IL-12 family of cytokines. When combined with EB13 (Epstein-Barr virus induced gene 3), p28 forms a heterodimer known as IL-27. p28 is thought to be a pro-inflammatory cytokine inducing immuno-modulatory effects, but the details of these effects are currently unclear and research is focused on delineating its specific biological functions.

Recombinant mouse p28 is a non-glycosylated protein, containing 207 amino acids, with a mass of 23.7 kDa.

Alternative Names:

IL-30, P28, IL-27 p28 subunit

Amino Acid Sequence:

MFPTDPLSLQ ELRREFTVSL YLARKLLSEV QGYVHSFAES
RLPGVNLDLL PLGYHLPNVS LTFQAWHLS DSERLCFLAT
TLRPFAMLG GLGTQGTWTS SEREQLWAMR LDLRDLHRHL
RFQVLAAGFK CSKEEEDKEE EEEEEEEKK LPLGALGGPN
QVSSQVSWPQ LLYTYQLLHS LELVLSRAVR DLLLLSLPRR
PGSAWDS

TECHNICAL INFORMATION

Source: *E.coli*

Physical Appearance:

Sterile Filtered white lyophilized (freeze-dried) powder.

Formulation:

Recombinant mouse IL-27/p28 is lyophilized at a concentration of 1 mg/ml in 10 mM Na₂PO₄, pH 7.5.

Stability:

Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

Reconstitution:

Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/ml, which can be further diluted into other aqueous solutions.

Protein Content and Purity determined by:

- UV spectroscopy at 280 nm
- RP-HPLC calibrated against a known standard
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

Endotoxin Level:

Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

Biological Activity:

The activity is measured via dose-dependent inhibition of IL-17A expression from mouse CD4+ splenocytes stimulated with TGF-β and IL-6. 50ng/ml typically inhibits greater than 25% of IL-17A expression.

Products are for research use only. They are not intended for human, animal, or diagnostic applications.

