

Recombinant Human IL-17A (ELISA Std.)

Catalog # / Size: 570509 / 4 pack

Source: Human IL-17A, amino acids Ile20-Ala155 (Accession # NM_002190) was expressed in *E. coli* and renatured from inclusion bodies.

Molecular Mass: The 137 amino acid N-terminal methionylated protein has a predicted molecular mass of 15,666 Da. This protein exists as a disulfide-linked homodimer. The DTT-reduced protein migrates at approximately 16kDa by SDS-PAGE. The non-reduced protein migrates

Purity: Purity is >98% as determined by SDS PAGE, Coomassie stained with Invitrogen SimplyBlue SafeStain.

Preparation: ELISA Standard 4-Pack contains four vials of recombinant human IL-17A at >5 ng per vial. Recommended for ELISA application only. Standards are calibrated against a BioLegend Master Calibrator.

Formulation: Lyophilized in sterile-filtered PBS, pH 7.2, containing 1% BSA.

Storage: Upon receipt, store unopened vials at 4°C immediately and use within 12 months from date of receipt. Prior to use, reconstitute the lyophilized powder with 0.2 ml of PBS containing a carrier protein (e.g., 1% BSA, protease free), pH7.4. Re-cap vial, vortex. Allow the reconstituted standard to sit at room temperature for 15 minutes, vortex again to mix completely. The reconstituted standard stock solution can be aliquoted into polypropylene vials and stored at -70°C for up to one month. Do not re-use diluted standards. Use a manual defrost freezer and avoid repeated freeze thaw cycles.

Applications:

Applications: ELISA

Recommended Usage: Each lot of this protein is quality control tested by ELISA assay. For use as an ELISA standard, a standard curve comprised of doubling dilutions from 2000 pg/ml to 15 pg/ml is suggested. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes: This IL-17A protein is useful as a standard in a human IL-17A sandwich ELISA in conjunction with the monoclonal antibody pair: unlabeled purified clone BL127 antibody (capture) and biotinylated clone BL23 antibody (detection).

Description: IL-17A is the founding member of the IL-17 family, a group of six structurally related pro-inflammatory cytokines. IL-17A, secreted by activated CD4+ Th17 cell subpopulation, elicits multiple biological activities on a variety of cells including: the induction of IL-6, IL-8, G-CSF, and PGE2 production in epithelial, endothelial or fibroblasts; the enhancement of surface expression of ICAM-1 in fibroblasts; activation of NF-κB and costimulation of T cell proliferation. Recent studies demonstrated that, in mice, activated IL-17-secreting CD4+ helper T cells (Th17 cells) mediate an autoimmune arthritis that clinically and immunologically resembles rheumatoid arthritis (RA). Human IL-17A shows 63%, 63% and 72% amino acid sequence identity to rat IL-17A, mouse IL-17A and a protein encoded by the ORF13 gene of herpesvirus Saimiri (HVS), respectively. Both recombinant and natural IL-17A have been shown to exist as a disulfide-linked homodimeric glycoprotein containing two ~16 kD monomers.

Antigen References:

1. Hirota K, et al. 2007. *J Exp Med.* 204:41.
2. Furuzawa-Carballeda J, et al. 2007. *Autoimmun Rev.* 6:169.
3. Witowski J, et al. 2007. *Kidney Int.* 71:514.
4. Gaffen SL, et al. 2006. *Vitam Horm.* 74:255.
5. Hymowitz S, et al. 2001. *EMBO J.* 20:5332.

Related Products:

Product
Purified anti-human IL-17A
Biotin anti-human IL-17A

Clone
BL127
BL23

Application
ELISA Capture
ELISA Detection



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