

Recombinant Mouse IL-22 (ELISA Std.)

Catalog# / Size	576209 / 4 pack
Regulatory Status	RUO
Other Names	Interleukin-22, IL-TIF
Description	<p>IL-22 is a cytokine structurally related to IL-10. Originally identified as a murine gene induced by IL-9 in T and mast cells, IL-22 was initially designated ILTIF (IL-10-related T cell-derived inducible factor). IL-22 belongs to a family of cytokines with limited homology to IL-10, namely IL-10, IL-19, IL-20, IL-24, IL-26, and the IFN-λs, IL-28A, IL-28B and IL-29. Human IL-22 shares 79% amino acid identity with murine IL-22 and 25% identity with human IL-10. IL-22 biological activity is initiated by binding to a cell surface complex composed of IL-22R1 and IL-10R2 receptor chains. Activity is further regulated through interactions with the soluble binding protein, IL-22BP, which shares sequence similarity with an extracellular region of IL-22R1 (sIL-22R1). Both chains of the IL-22R complex belong to the class II CRF. Two types of IL-22 binding receptors have been discovered, a membrane-bound receptor and a soluble receptor, both encoded by different genes. IL-22 is produced by Th17 cells and newly identified Th22 cells. It plays a critical role in mucosal immunity in addition to the deregulated inflammation observed in autoimmune diseases.</p>

Product Details

Source	Mouse IL-22, amino acids Leu34-Val179 (Accession # NM_016971) was expressed in <i>E. coli</i> .
Molecular Mass	The 147 amino acid N-terminal methionylated recombinant protein has a predicted molecular mass of approximately 16.8 kD. The DTT-reduced protein migrates at approximately 15 kD and the non-reduced protein migrates at approximately 13 kD by SDS-PAGE.
Purity	Purity is >98%, as determined by Coomassie stained SDS-PAGE.
Formulation	Lyophilized in sterile-filtered PBS, pH 7.2, containing 1% BSA, 0.09% sodium azide, and protease inhibitors.
Endotoxin Level	Endotoxin level is <0.1 EU/ μ g (<0.01 ng/ μ g) protein as determined by the LAL method.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
Storage & Handling	Upon receipt, store unopened vials between 2°C and 8°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), pH 7.4. 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.
Application	ELISA - Quality tested
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 250 pg/ml to 3.9 pg/ml is suggested. It is recommended that the reagent be titrated for optimal performance for each application.
Application Notes	This IL-22 protein is useful as a standard in a mouse IL-22 sandwich ELISA, using unlabeled poly5164 antibody (Cat. No. 516401) for capture and biotinylated poly5164 antibody (Cat. No. 516407) for detection.

Antigen Details

Biology Area	Stem Cells, Immunology, Cell Biology
Molecular Family	Cytokines/Chemokines
Antigen References	1. Dumoutier L, <i>et al.</i> 2000. <i>J. Immun.</i> 164:1814.

2. Xie MH, *et al.* 2000. *J. Biol. Chem.* 275:31335.
3. Jones BC, *et al.* 2008. *Structure*.
4. Kotenko SV, *et al.* 2001. *J. Immun.* 166:7096.
5. Chang C, *et al.* 2006. *Cell Research* 16:902.

Gene ID

[50929](#)

Related Protocols

[Sandwich ELISA Protocol](#)

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