



Recombinant Protein Technical Manual

Recombinant Human Interleukin-22/IL-22 Protein (Active) RPES1532

Product Data:

Product SKU: RPES1532

Size: 10µg

Species: Human

Expression host: E. coli

Uniprot: Q9GZX6

Protein Information:

Molecular Mass: 16.9 kDa

AP Molecular Mass: 14 kDa

Tag:

Bio-activity: Measured by its ability to induce IL0 secretion in COLO 205 human colorectal adenocarcinoma cells. The ED50 for this effect is 0.11 ng/ml.

Purity: > 95% as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.4.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Interleukin-22; IL-22; Cytokine Zcyto18; IL0-related T-cell-derived-inducible factor; IL-TIF; IL22;IL-D110;IL-TIF;ILTIF;TIFa;TIFIL-23;zcyto18

Immunogen Information:

Sequence: Ala34-Ile179

Background:

Interleukin-22(IL-22) is a member of a group of the IL0 family, a class of potent mediators of cellular inflammatory responses. IL-22 is produced by activated DC and T cells. IL-22 and IL0 receptor chains play a role in cellular targeting and signal transduction. It can initiate and regulate innate immune responses against bacterial pathogens especially in epithelial cells such as respiratory and gut epithelial cells. IL-22 along with IL7 likely plays a role in the coordinated response of both adaptive and innate immune systems. IL-22 also promotes hepatocyte survival in the liver and epithelial cells in the lung and gut similar to IL0. Biological activity of IL-22 is initiated by binding to a cell-surface complex consisting of IL-22R1 and IL0R2 receptor chains. IL-22 biological activity is further regulated by interactions with a soluble binding protein, IL-22BP. IL-22BP and an extracellular region of IL-22R1 share sequence similarity. In some cases, the pro-inflammatory versus tissue-protective functions of IL-22 are regulated by cytokine IL7A.