



# Recombinant Protein Technical Manual

## Recombinant Human Interleukin-22/IL-22 Protein (C-hlgG2 Fc)(Active) RPES2229

### Product Data:

**Product SKU:** RPES2229

**Size:** 10µg

**Species:** Human

**Expression host:** Human Cells

**Uniprot:** Q9GZX6

### Protein Information:

**Molecular Mass:** 43.4 kDa

**AP Molecular Mass:** 50-62 kDa

**Tag:** C-hlgG2 Fc

**Bio-activity:** Measured by its ability to induce IL0 secretion in COLO 205 human colorectal adenocarcinoma cells. The ED50 for this effect is 90.41 ng/ml.

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

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

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°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 PBS, pH7.4.

**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.