

Human IL22 protein, His tag

Cat. No. GTX00189-pro

Applications Functional Assay**Species** Human**Package**

10 µg

Applications

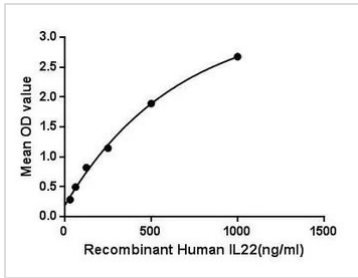
Application Note

Interleukin 22 (IL22) is a member of a group of cytokines called the IL-10 family or IL-10 superfamily, a class of potent mediators of cellular inflammatory responses. It shares use of IL-10R2 in cell signaling with other members of this family, IL-10, IL-26, IL-28A/B and IL-29. IL-22 is produced by activated NK and T cells and initiates innate immune responses against bacterial pathogens especially in epithelial cells such as respiratory and gut epithelial cells. IL-22 biological activity is initiated by binding to a cell-surface complex composed of IL-22R1 and IL-10R2 receptor chains and further regulated by interactions with a soluble binding protein. IL-22 can contribute to immune disease through the stimulation of inflammatory responses, S100s and defensins. IL-22 also promotes hepatocyte survival in the liver and epithelial cells in the lung and gut similar to IL-10. Besides, Interleukin 10 Receptor Beta (IL10Rb) has been identified as an interactor of IL22, thus a binding ELISA assay was conducted to detect the interaction of recombinant human IL22 and recombinant human IL10Rb. Briefly, IL22 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to IL10Rb-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-IL22 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50 µl stop solution to the wells and read at 450nm immediately. The binding activity of IL22 and IL10Rb was in a dose dependent manner.

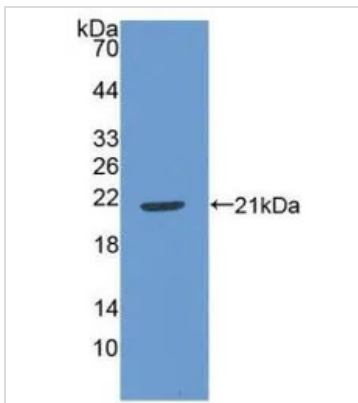
Observed MW (kDa) 21 kDa.

Properties

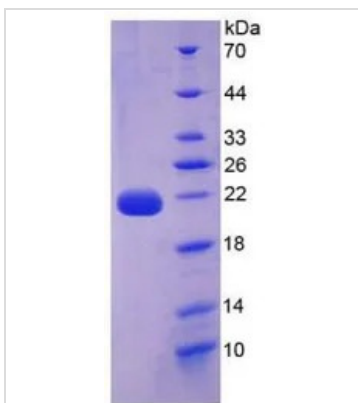
Form Lyophilized powder**Buffer** Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose.**Preservative** ProClin 300**Storage** For short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.**Region/Sequence** N-terminal His-Tag; Ala34~Ile179 (NP_065386.1)**Expression System** E. coli**Purity** > 95%**Endotoxin** < 1 EU/µg**Conjugation** Unconjugated**Note** For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.For full product information, images and publications, please visit our [website](#).

DATA IMAGES

GTX00189-pro Functional Assay Image

Functional ELISA analysis of GTX00189-pro Human IL22 protein which can bind immobilized IL10Rb protein.


GTX00189-pro Image

WB analysis of GTX00189-pro Human IL22 protein.


GTX00189-pro Image

SDS-PAGE analysis of GTX00189-pro Human IL22 protein.



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