Proteins



Product Data Sheet

IL-22R alpha 1 Protein, Human (HEK293, Fc)

Cat. No.: HY-P77967

Synonyms: IL-22R-alpha-1; IL-22RA1; CRF2-9; IL22R; IL2R1; IL-TIF-R1; zcytoR11

Species: HEK293 Source:

Q8N6P7 (H16-T228) Accession:

Gene ID: 58985 Molecular Weight: 60-68 kDa

PROPERTIES

HAPEDPSDLL

Q HVKFQSSNFE NILTWDSGPE GTPDTVYSIE YKTYGERDWV AKKGCQRITR KSCNLTVETG NLTELYYARV TAVSAGGRSA TKMTDRFSSL $\mathsf{Q}\;\mathsf{H}\;\mathsf{T}\;\mathsf{T}\;\mathsf{L}\;\mathsf{K}\;\mathsf{P}\;\mathsf{P}\;\mathsf{D}\;\mathsf{V}$ TCISKVRSIQ MIVHPTPTPI RAGDGHRLTL EDIFHDLFYH LELQVNRTYQ MHLGGKQREY EFFGLTPDTE FLGTIMICVP TWAKESAPYM

CRVKTLPDRT WΤ

Biological Activity

1.Immobilized Human IL-22, His Tag at 2 μg/ml (100 μl/Well) on the plate. Dose response curve for Human IL-22R alpha 1, hFc Tag with the EC₅₀ of 10.2 ng/ml determined by ELISA.

2.Immobilized Human IL-22R alpha 1, hFc Tag at 0.5 μ g/mL (100 μ l/well) on the plate. Dose response curve for Biotinylated Anti-IL-22R alpha 1 Antibody, hFc Tag with the EC₅₀ of 11.2-18.4 ng/ml determined by ELISA.

Appearance

Lyophilized powder.

Formulation

Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4. Normally 8% trehalose is added as protectant before lyophilization.

Endotoxin Level

<1 EU/µg, determined by LAL method.

Reconsititution

It is not recommended to reconstitute to a concentration less than 100 μ g/mL in ddH₂O.

Storage & Stability

Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.

Shipping

Room temperature in continental US; may vary elsewhere.

DESCRIPTION

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Background

IL-22R alpha 1 (IL22RA1) Protein is a single-pass type I membrane protein. IL-22R alpha 1 expresses in colon, liver, lung, pancreas and kidney. IL-22R alpha 1 is primarily present on epithelial cells and certain monocyte subsets, and very limited IL-22R alpha 1 expression is found on other immune cells^{[1][2]}.

The sequence of amino acids in IL-22R alpha 1 from different species is very different (less than 85% similarity among human, rat and Canine).

IL-22R alpha 1 is an essential component of the high-affinity IL-22 receptor enabling IL-22 signaling via JAK/STAT pathways. IL-22R alpha 1 is a component of one of the receptors for IL-20 and IL-24 formed and signaling through STATs activation. IL-22R alpha 1 mediates IL-24 antiangiogenic activity as well as IL24 inhibitory effect on endothelial cell tube formation and differentiation^{[2][3]}.

REFERENCES

[1]. Cui X, et, al. IL22 furthers malignant transformation of rat mesenchymal stem cells, possibly in association with IL22RA1/STAT3 signaling. Oncol Rep. 2019 Apr;41(4):2148-2158.

[2]. Kragstrup TW, et, al. The IL-20 Cytokine Family in Rheumatoid Arthritis and Spondyloarthritis. Front Immunol. 2018 Sep 25;9:2226.

[3]. Persaud L, et, al. Mechanism of Action and Applications of Interleukin 24 in Immunotherapy. Int J Mol Sci. 2016 Jun 2;17(6):869.

Caution: Product has not been fully validated for medical applications. For research use only.

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