

IL-22RA1 Protein, Canine, Recombinant (His)

General Information

Synonyms:	interleukin 22 receptor, alpha 1; interleukin 22 receptor, α 1
Protein Construction:	A DNA sequence encoding the canine IL22RA1 (XP_855113.2) (Met1-The226) was expressed with a C-terminal polyhistidine tag.
Species:	Canine
Expression Host:	HEK293
Accession:	A0A8C0M3C4
Molecular Weight:	25.6 kDa (predicted)

QC Testing

Biological Activity:	Immobilized canine IL22RA1-His at 10 μ g/ml (100 μ l/well) can bind biotinylated IL22, The EC50 of biotinylated IL22 is 0.23-0.55 μ g/ml.
Purity:	> 95 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU per μ g of the protein as determined by the LAL method
Formulation:	Lyophilized from sterile PBS, pH 7.4. Please contact us for any concerns or special requirements. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the hard copy of CoA.

Preparation and Storage

Reconstitution:	A hardcopy of datasheet with reconstitution instructions is sent along with the products. Please refer to it for detailed information.
Stability & Storage:	Samples are stable for up to twelve months from date of receipt at -20°C to -80°C. Store it under sterile conditions at -20°C to -80°C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping:	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Protein Background

IL-22R belongs to the type II cytokine receptor family. It contains 2 fibronectin type-III domains and is expressed in the colon, liver, lung, pancreas, and kidney. IL-22R also can be expressed in keratinocytes of normal skin as well as in psoriatic skin lesions. Overexpression of IL-22R can be detected in synovial fluid cells from rheumatoid arthritis and spondyloarthropathy patients. IL-22R is a component of the receptor for IL20, IL22, and IL24. The

component of IL-22R formed by IL22RA1 and IL10RB enables IL22 signaling via JAK/STAT pathways. IL22 also induces activation of MAPK1/MAPK3 and Akt kinases pathways. Component of one of the receptors for IL20 and IL24 formed by IL22RA1 and IL20RB also signaling through STATs activation. IL-22R mediates IL24 antiangiogenic activity as well as IL24 inhibitory effect on endothelial cell tube formation and differentiation.

Reference

Xie MH, et al. (2000) Interleukin (IL)-22, a novel human cytokine that signals through the interferon receptor-related proteins CRF2-4 and IL-22R. J Biol Chem. 275(40):31335-9.