

CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	IL-22, Human, pAb	Expiry date	-
Catalog number	HP9073	Amount	100 µg
Lot number	-	Concentration	1 mg/ml
Volume	100 µl	Conjugate	None
Formulation	0.2 µm filtered in PBS+0.02%NaN3+0.5%BSA+50%glycerol	Purification	Affinity purified
Host Species	Rabbit IgG		
Endotoxin	N.A.		
Storage	-20°C		

Application notes

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #								
Yes						•		•
No								
N.D.	•	•	•	•	•		•	

N.D. = Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot

Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.

General Information

Description	IL22 is a key regulator of immunity and inflammation at the mucosal surface. It is produced by cells from the innate and adaptive immune system, like ILCs, γδT-cells, NK, TH1,17&22 cells. The latter are together with ILC3s the main source of IL-22. IL-22 is considered as a non-inflammatory cytokine and show similarities with IL-10. ILC3s are present in large numbers in mucosal layers and do not require antigen recognition for their activation. In barrier organs the mucosal layer is constantly in contact with the environment and needs to adapt to this continuously trigger by microbes and their metabolites in order to prevent acute inflammation. Thereby IL-22 has important functions in host defense and tissue repair. IL-22 provides protective innate immunity in the absence of an adaptive response. IL-22 signals via heterodimeric receptor complex (IL-22R1&2) expressed on epithelial cells of the lung, gut, skin, liver, pancreas and kidneys. It is not expressed by hematopoietic cells. Another mechanism of IL-22 to control pathogens is by aiding the binding of complement C3 to the bacteria. Furthermore IL22 increases C3 expression in the liver. IL-22 binding protein exists in humans as a soluble form of IL-22 receptor. Binding to the receptor results primarily in JAK/STAT downstream signaling IL-22 induces expression of chemokines like CXCL1&5 and stimulates the expression of antimicrobial peptides such as beta-defensins, S100 peptides and calprotectin. Elevated levels of this IL-22 has been seen in chronic inflammatory diseases such as psoriasis, rheumatoid arthritis and some lung diseases. The antibody is cross reactive to mouse and rat IL-22.		
Cross reactivity	Mouse: Yes; Rat: Yes		
Immunogen	Synthetic peptide, human IL-22		
Gene	Gene name: IL22	Entrez Gene ID 50616	Uniprot Q9GZX6
Storage&stability	Product should be stored at -20°C. Under recommended storage conditions, product is stable for at least one year.		

Precautions

For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product.

We hereby certify that the above-stated information is correct and that this product has been successfully tested by the Quality Control Department. This product was released for sale according to the existing specifications. This document has been produced electronically and is valid without a signature.

Approved by Manager of QC
Robbert Zwinkels

Date
21/06/2019

Do you have any questions or comments regarding this product? Please contact us via support@hycultbiotech.com.