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IL-22 Antibody

Catalog # ASC11732

Product Information

Application	WB, IF, ICC, E
Primary Accession	Q9GZX6
Other Accession	NP_065386, 10092625
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	20011
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	IL-22 antibody can be used for detection of IL-22 by Western blot at 1 - 2 g/ml. Antibody can also be used for Immunocytochemistry starting at 5 g/mL. For immunofluorescence start at 20 g/mL.

Additional Information

Gene ID	50616
Other Names	Interleukin-22, IL-22, Cytokine Zcyto18, IL-10-related T-cell-derived-inducible factor, IL-TIF, IL22, ILTIF, ZCYTO18
Target/Specificity	IL22; IL-22 antibody is human, mouse, and rat reactive. Multiple isoforms of IL-22 are known to exist.
Reconstitution & Storage	IL-22 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year.
Precautions	IL-22 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	IL22
Synonyms	ILTIF, ZCYTO18
Function	Cytokine that plays a critical role in modulating tissue responses during inflammation (PubMed:17204547). Plays an essential role in the regeneration of epithelial cells to maintain barrier function after injury and for the prevention of further tissue damage (PubMed:17204547). Unlike most of the cytokines, has no effect on immune cells. Signals through a heterodimeric receptor composed of two subunits, the specific receptor IL22RA1 which is present on non-immune cells in many organs and the shared subunit IL10RB (PubMed:10875937, PubMed:18599299). Ligation of IL22RA1 with IL22

induces activation of the tyrosine kinases JAK1 and TYK2, which in turn activates STAT3. In turn, promotes cell survival and proliferation through STAT3, ERK1/2 and PI3K/AKT pathways (PubMed:25793261, PubMed:31311100). Promotes phosphorylation of GSK3B at 'Ser-9' and CTTN (By similarity). Promotes epithelial cell spreading (By similarity).

Cellular Location Secreted.

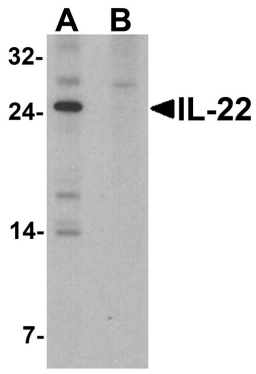
Background

Interleukin-22 (IL-22) is a cytokine important for the modulation of tissue responses during inflammation (1). Unlike the distantly related IL-10, IL-22 does not inhibit the production of proinflammatory cytokines in monocytes in response to LPS, but it has some inhibitory effects on IL-4 production from Th2 T cells. IL-22 is expressed by both the adaptive arm of the immune system such as CD4 T cell subsets including Th17 cells, as well as by innate lymphocytes such as NK and LTi-like cells (2). IL-22 is highly expressed in several chronic inflammatory conditions, and studies suggest that IL-22 plays both inflammatory and protective roles (3).

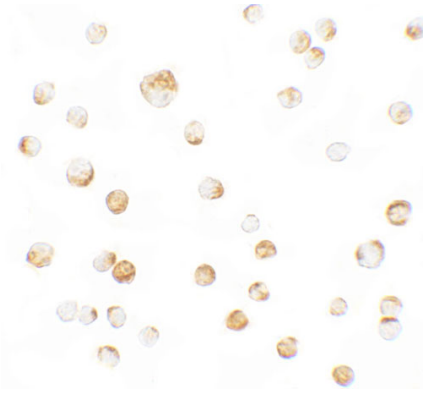
References

Xie MH, Aggarwal S, Ho WH, et al. Interleukin (IL)-22, a novel human cytokine that signals through the interferon receptor-related proteins CRF2-4 and IL-22R. J. Biol. Chem. 2000; 275:31335-9.
Wolk K, Kunz S, Witte E, et al. IL-22 increases the innate immunity of tissues. Immunity 2004; 21:241-54.
Wolk K, Witte E, Wallace E, et al. IL-22 regulates the expression of genes responsible for antimicrobial defense, cellular differentiation, and mobility in keratinocytes: a potential role in psoriasis. Eur. J. Immunol. 36:1309-23.

Images

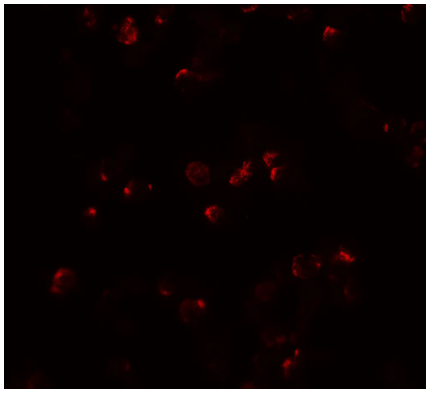


Western blot analysis of IL-22 in HeLa cell lysate with IL-22 antibody at 1 µg/ml in (A) the absence and (B) the presence of blocking peptide.



Immunocytochemistry of IL-22 in HeLa cells with IL-22 antibody at 5 µg/mL.

Immunofluorescence of IL-22 in HeLa cells with IL-22 antibody at 20 µg/mL.



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