

IL-22 Antibody

Catalog # ASC11732

Specification

IL-22 Antibody - Product Information

Application WB, ICC, IF Primary Accession Q9GZX6

Other Accession
Reactivity
Host
Clonality

NP_065386, 10092625
Human, Mouse, Rat
Rabbit
Polyclonal

Isotype IgG

Calculated MW Predicted: 20 kDa

Observed: 25 kDa KDa

Application Notes IL-22 antibody can be used for detection of

IL-22 by Western blot at 1 - 2 μ g/ml.

Antibody can also be used for

Immunocytochemistry starting at 5 $\mu g/mL$. For immunofluorescence start at 20 $\mu g/mL$.

IL-22 Antibody - Additional Information

Gene ID 50616

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°C for three months and -20°C, stable for up to one year.

Precautions

IL-22 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

IL-22 Antibody - 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).

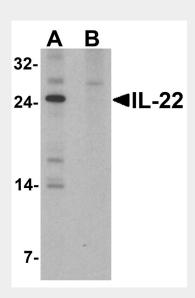
Cellular Location Secreted.

IL-22 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

IL-22 Antibody - Images

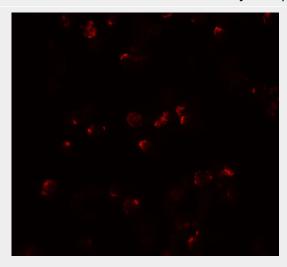


Western blot analysis of IL-22 in HeLa cell lysate with IL-22 antibody at 1 μ g/ml in (A) the absence and (B) the presence of blocking peptide.





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.

IL-22 Antibody - 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).

IL-22 Antibody - 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.