

#### **IL-22 Antibody**

Catalog # ASC11732

# **Specification**

### **IL-22 Antibody - Product Information**

Application WB, IF, ICC, E
Primary Accession Q9GZX6

Other Accession
Reactivity
Host
Reablit
NP\_065386, 10092625
Human, Mouse, Rat
Rabbit

Clonality 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 μg/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:<a href="http://www.uniprot.org/citations/17204547" target="\_blank">17204547</a>). 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:<a

href="http://www.uniprot.org/citations/17204547" target="\_blank">17204547</a>). 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:<a

href="http://www.uniprot.org/citations/10875937" target="\_blank">10875937</a>, PubMed:<a href="http://www.uniprot.org/citations/18599299" target="\_blank">18599299</a>). 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:<a href="http://www.uniprot.org/citations/25793261" target="\_blank">25793261</a>, PubMed:<a href="http://www.uniprot.org/citations/31311100" target="\_blank">31311100</a>, Promotes phosphorylation of GSK3B at 'Ser-9' and CTTN (By similarity). Promotes epithelial cell spreading (By similarity).

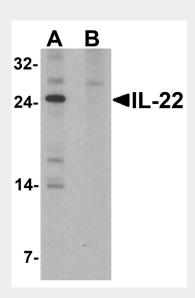
**Cellular Location** Secreted.

### **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

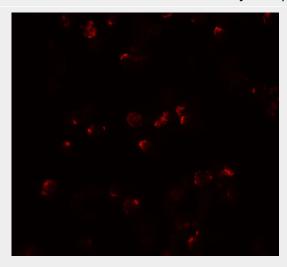


Western blot analysis of IL-22 in HeLa cell lysate with IL-22 antibody at 1  $\mu$ g/ml in (A) the absence and (B) the presence of blocking peptide.





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.