

### **IL11 Antibody (N-Term)**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22261a

## **Specification**

## IL11 Antibody (N-Term) - Product Information

Application WB, FC,E
Primary Accession P20809
Reactivity Human
Host Rabbit
Clonality polyclonal
Isotype Rabbit IgG
Calculated MW 21429

# IL11 Antibody (N-Term) - Additional Information

### **Gene ID 3589**

#### **Other Names**

Interleukin-11, IL-11, Adipogenesis inhibitory factor, AGIF, Oprelvekin, IL11

### Target/Specificity

This IL11 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 27-61 amino acids from human IL11.

### **Dilution**

WB~~1:2000

FC~~1:25

E~~Use at an assay dependent concentration.

### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

IL11 Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

# IL11 Antibody (N-Term) - Protein Information

## Name IL11 (<u>HGNC:5966</u>)

**Function** Cytokine that stimulates the proliferation of hematopoietic stem cells and megakaryocyte progenitor cells and induces megakaryocyte maturation resulting in increased





platelet production (PubMed:<u>2145578</u>). Also promotes the proliferation of hepatocytes in response to liver damage. Binding to its receptor formed by IL6ST and IL11RA activates a signaling cascade that promotes cell proliferation (PubMed:<u>12919066</u>). Signaling leads to the activation of intracellular protein kinases and the phosphorylation of STAT3. The interaction with the membrane-bound IL11RA and IL6ST stimulates 'classic signaling', whereas the binding of IL11 and soluble IL11RA to IL6ST stimulates 'trans-signaling' (PubMed:<u>30279168</u>).

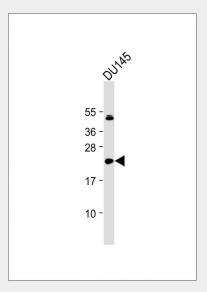
**Cellular Location** Secreted

## IL11 Antibody (N-Term) - Protocols

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

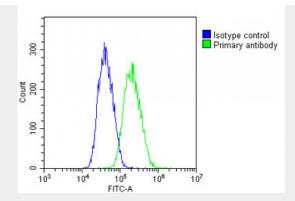
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# IL11 Antibody (N-Term) - Images



Anti-IL11 Antibody (N-Term) at 1:2000 dilution + DU145 whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 21 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





Overlay histogram showing PC-3 cells stained with AP22261a(green line). The cells were fixed with 2% paraformaldehyde and then permeabilized with 90% methanol for 10 min. The cells were then incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (1:25 dilution) for 60 min at  $37^{\circ}$ C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed at 1/200 dilution for 40 min at Room temperature. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

## IL11 Antibody (N-Term) - Background

Cytokine that stimulates the proliferation of hematopoietic stem cells and megakaryocyte progenitor cells and induces megakaryocyte maturation resulting in increased platelet production (PubMed:2145578). Also promotes the proliferation of hepatocytes in response to liver damage. Binding to its receptor formed by IL6ST and either IL11RA1 or IL11RA2 activates a signaling cascade that promotes cell proliferation (PubMed:12919066). Signaling leads to the activation of intracellular protein kinases and the phosphorylation of STAT3.

### IL11 Antibody (N-Term) - References

Paul S.R., et al. Proc. Natl. Acad. Sci. U.S.A. 87:7512-7516(1990). Kawashima I., et al. FEBS Lett. 283:199-202(1991). McKinley D., et al. Genomics 13:814-819(1992). Ota T., et al. Nat. Genet. 36:40-45(2004). Grimwood J., et al. Nature 428:529-535(2004).