

**IL-12A Polyclonal Antibody**  
Catalog # AP70494**Specification****IL-12A Polyclonal Antibody - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">P29459</a>
Reactivity	<b>Human, Mouse, Rat</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>

**IL-12A Polyclonal Antibody - Additional Information****Gene ID** 3592**Other Names**

IL12A; NKSF1; Interleukin-12 subunit alpha; IL-12A; Cytotoxic lymphocyte maturation factor 35 kDa subunit; CLMF p35; IL-12 subunit p35; NK cell stimulatory factor chain 1; NKSF1

**Dilution**

WB~~Western Blot: 1/500 - 1/2000.IHC-p:1:50-300 ELISA: 1/20000. Not yet tested in other applications.

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions**

-20°C

**IL-12A Polyclonal Antibody - Protein Information****Name** IL12A**Synonyms** NKSF1**Function**

Heterodimerizes with IL12B to form the IL-12 cytokine or with EB13/IL27B to form the IL-35 cytokine (PubMed: [8605935](http://www.uniprot.org/citations/8605935), PubMed: [8943050](http://www.uniprot.org/citations/8943050)). IL-12 is primarily produced by professional antigen-presenting cells (APCs) such as B-cells and dendritic cells (DCs) as well as macrophages and granulocytes and regulates T-cell and natural killer-cell responses, induces the production of interferon-gamma (IFN-gamma), favors the differentiation of T-helper 1 (Th1) cells and is an important link between innate resistance and adaptive immunity (PubMed: [1673147](http://www.uniprot.org/citations/1673147), PubMed: [1674604](http://www.uniprot.org/citations/1674604), PubMed: [8605935](http://www.uniprot.org/citations/8605935)).

Mechanistically, exerts its biological effects through a receptor composed of IL12R1 and IL12R2

subunits (PubMed:<a href="http://www.uniprot.org/citations/8943050" target="\_blank">8943050</a>). Binding to the receptor results in the rapid tyrosine phosphorylation of a number of cellular substrates including the JAK family kinases TYK2 and JAK2 (PubMed:<a href="http://www.uniprot.org/citations/7528775" target="\_blank">7528775</a>). In turn, recruited STAT4 gets phosphorylated and translocates to the nucleus where it regulates cytokine/growth factor responsive genes (PubMed:<a href="http://www.uniprot.org/citations/7638186" target="\_blank">7638186</a>). As part of IL-35, plays essential roles in maintaining the immune homeostasis of the liver microenvironment and functions also as an immune-suppressive cytokine (By similarity). Mediates biological events through unconventional receptors composed of IL12RB2 and gp130/IL6ST heterodimers or homodimers (PubMed:<a href="http://www.uniprot.org/citations/22306691" target="\_blank">22306691</a>). Signaling requires the transcription factors STAT1 and STAT4, which form a unique heterodimer that binds to distinct DNA sites (PubMed:<a href="http://www.uniprot.org/citations/22306691" target="\_blank">22306691</a>).

### Cellular Location

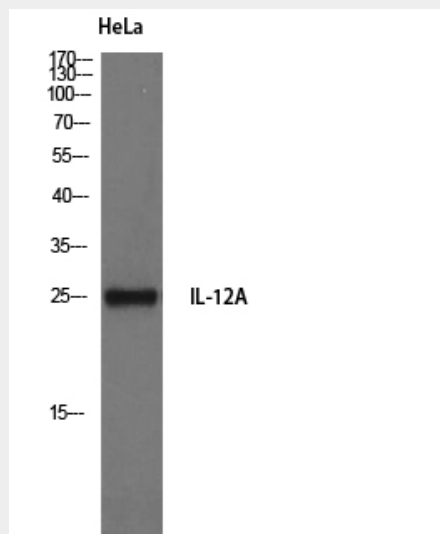
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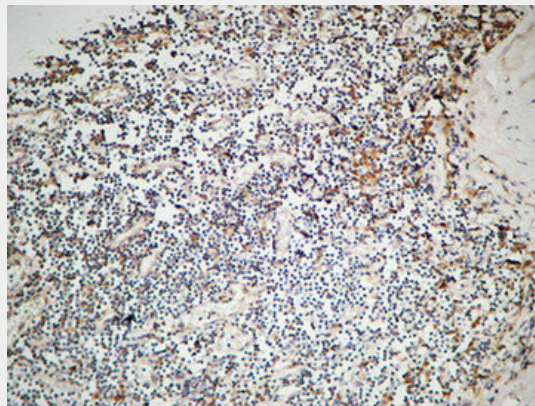
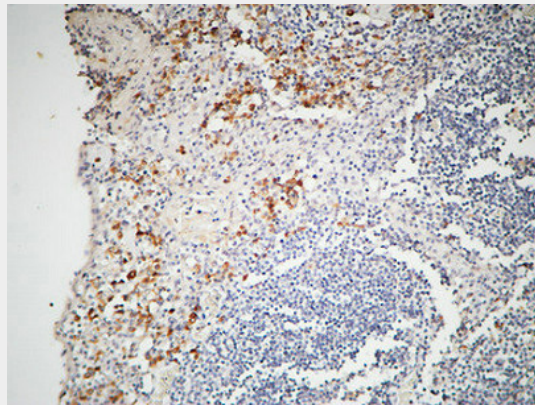
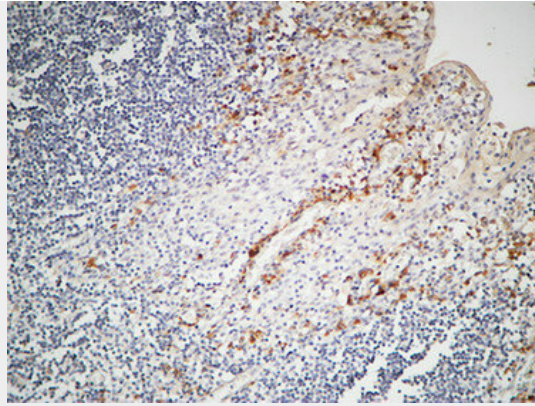
### IL-12A Polyclonal Antibody - Protocols

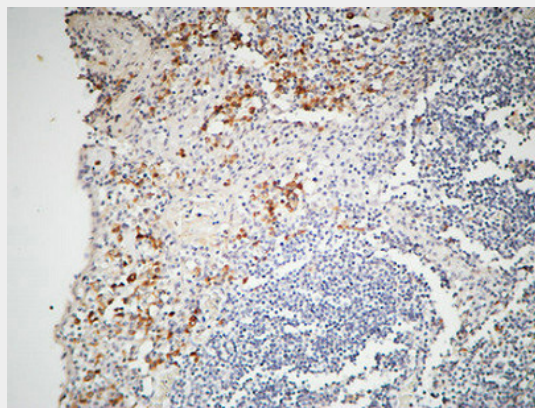
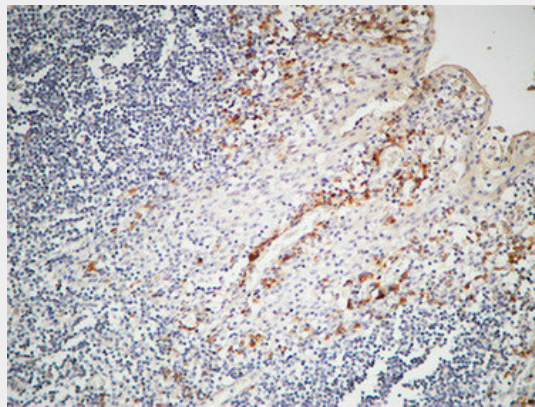
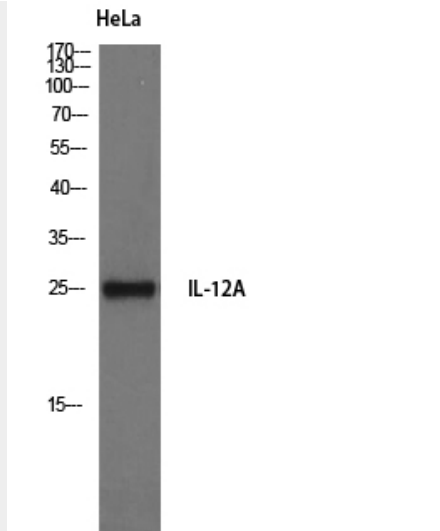
Provided below are standard protocols that you may find useful for product applications.

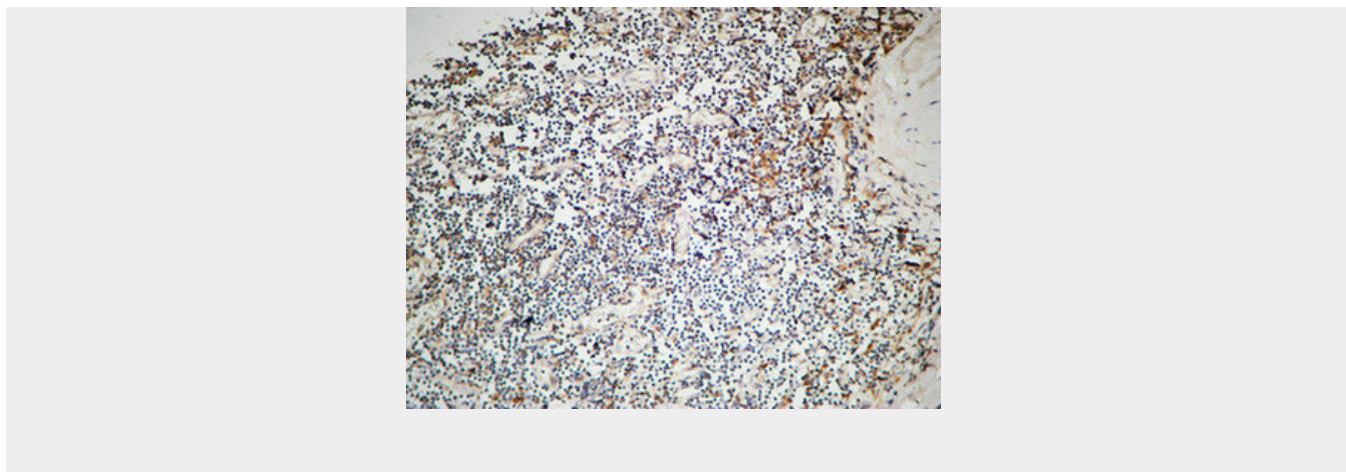
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### IL-12A Polyclonal Antibody - Images









### **IL-12A Polyclonal Antibody - Background**

Cytokine that can act as a growth factor for activated T and NK cells, enhance the lytic activity of NK/lymphokine- activated killer cells, and stimulate the production of IFN-gamma by resting PBMC.