

**Tyk 2 Polyclonal Antibody**  
Catalog # AP72974**Specification****Tyk 2 Polyclonal Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P29597</a>
Reactivity	Human, Mouse, Monkey
Host	Rabbit
Clonality	Polyclonal

**Tyk 2 Polyclonal Antibody - Additional Information****Gene ID** 7297**Other Names**

TYK2; Non-receptor tyrosine-protein kinase TYK2

**Dilution**

WB~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. 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

**Tyk 2 Polyclonal Antibody - Protein Information****Name** TYK2**Function**

Tyrosine kinase of the non-receptor type involved in numerous cytokines and interferons signaling, which regulates cell growth, development, cell migration, innate and adaptive immunity (PubMed: [10542297](http://www.uniprot.org/citations/10542297)), (PubMed: [10995743](http://www.uniprot.org/citations/10995743)), (PubMed: [7657660](http://www.uniprot.org/citations/7657660)), (PubMed: [7813427](http://www.uniprot.org/citations/7813427)), (PubMed: [8232552](http://www.uniprot.org/citations/8232552)). Plays both structural and catalytic roles in numerous interleukins and interferons (IFN-alpha/beta) signaling (PubMed: [10542297](http://www.uniprot.org/citations/10542297)). Associates with heterodimeric cytokine receptor complexes and activates STAT family members including STAT1, STAT3, STAT4 or STAT6 (PubMed: [10542297](http://www.uniprot.org/citations/10542297), PubMed: [7638186](http://www.uniprot.org/citations/7638186)). The heterodimeric cytokine receptor complexes are composed of (1) a TYK2-associated receptor chain (IFNAR1, IL12RB1, IL10RB or IL13RA1), and (2) a second receptor chain associated either with JAK1

or JAK2 (PubMed:<a href="http://www.uniprot.org/citations/10542297" target="\_blank">10542297</a>, PubMed:<a href="http://www.uniprot.org/citations/25762719" target="\_blank">25762719</a>, PubMed:<a href="http://www.uniprot.org/citations/7526154" target="\_blank">7526154</a>, PubMed:<a href="http://www.uniprot.org/citations/7813427" target="\_blank">7813427</a>). In response to cytokine-binding to receptors, phosphorylates and activates receptors (IFNAR1, IL12RB1, IL10RB or IL13RA1), creating docking sites for STAT members (PubMed:<a href="http://www.uniprot.org/citations/7526154" target="\_blank">7526154</a>, PubMed:<a href="http://www.uniprot.org/citations/7657660" target="\_blank">7657660</a>). In turn, recruited STATs are phosphorylated by TYK2 (or JAK1/JAK2 on the second receptor chain), form homo- and heterodimers, translocate to the nucleus, and regulate cytokine/growth factor responsive genes (PubMed:<a href="http://www.uniprot.org/citations/10542297" target="\_blank">10542297</a>, PubMed:<a href="http://www.uniprot.org/citations/25762719" target="\_blank">25762719</a>, PubMed:<a href="http://www.uniprot.org/citations/7657660" target="\_blank">7657660</a>). Negatively regulates STAT3 activity by promoting phosphorylation at a specific tyrosine that differs from the site used for signaling (PubMed:<a href="http://www.uniprot.org/citations/29162862" target="\_blank">29162862</a>).

### Tissue Location

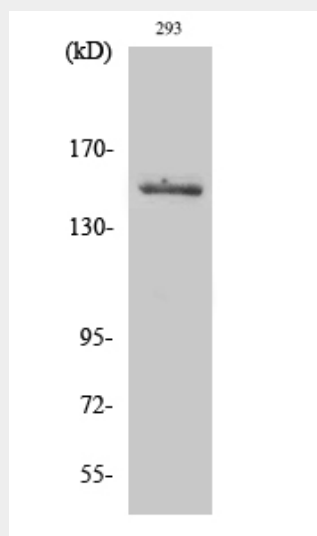
Observed in all cell lines analyzed. Expressed in a variety of lymphoid and non-lymphoid cell lines

### Tyk 2 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](#)

### Tyk 2 Polyclonal Antibody - Images



**Tyk 2 Polyclonal Antibody - Background**

Probably involved in intracellular signal transduction by being involved in the initiation of type I IFN signaling. Phosphorylates the interferon-alpha/beta receptor alpha chain.