

# Tyk 2 Polyclonal Antibody

Catalog # AP72974

#### **Product Information**

**Application** WB, IHC-P, IF **Primary Accession** P29597

**Reactivity** Human, Mouse, Monkey

HostRabbitClonalityPolyclonalCalculated MW133650

## **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. IHC-P~~N/A IF~~1:50~200

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

azide.

Storage Conditions -20°C

## **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,

PubMed: 10995743, PubMed: 7657660, PubMed: 7813427, PubMed: 8232552). Plays both structural and catalytic roles in numerous interleukins and interferons (IFN-alpha/beta) signaling (PubMed: 10542297). Associates with heterodimeric cytokine receptor complexes and activates STAT family members including STAT1, STAT3, STAT4 or STAT6 (PubMed: 10542297, PubMed: 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: 10542297, PubMed: 25762719, PubMed: 7526154, PubMed: 7813427). In response to cytokine-binding to receptors,

phosphorylates and activates receptors (IFNAR1, IL12RB1, IL10RB or IL13RA1),

creating docking sites for STAT members (PubMed: 7526154,

PubMed:7657660). 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:10542297, PubMed:25762719, PubMed:7657660). Negatively regulates STAT3 activity by promototing phosphorylation at a specific tyrosine that differs from the site used for signaling (PubMed:29162862).

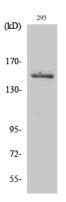
#### **Tissue Location**

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

# **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.

## **Images**



Western Blot analysis of various cells using Tyk 2 Polyclonal Antibody diluted at 1: 2000. Secondary antibody was diluted at 1:20000

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.