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TYK2 Antibody
Catalog # ASC11596

Specification

TYK2 Antibody - Product Information

Application	**WB**
Primary Accession	P29597
Other Accession	NP_003322, 187608615
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**Predicted: 131 kDa KDa**
Application Notes	**TYK2 antibody can be used for detection of TYK2 by Western blot at 1 - 2 µg/mL.**

TYK2 Antibody - Additional Information

Gene ID **7297**

Target/Specificity
TYK2; At least three isoforms of TYK2 are known to exist; this antibody only detects the two longest isoforms.

Reconstitution & Storage
TYK2 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year.

Precautions
TYK2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

TYK2 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:8232552, PubMed:7813427, PubMed:7657660, PubMed:10995743, PubMed:10542297). 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:7813427, PubMed:10542297, PubMed:7526154, PubMed:25762719). 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:7657660, PubMed:10542297, PubMed:25762719). Negatively regulates STAT3 activity by promototing phosphorylation at a specific tyrosine that differs from the site used for signaling (PubMed:29162862).

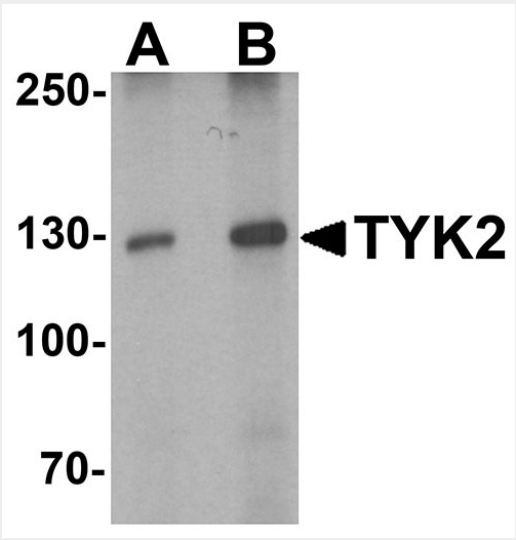
Tissue Location
Observed in all cell lines analyzed. Expressed in a variety of lymphoid and non-lymphoid cell lines

TYK2 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 Cytomety
- Cell Culture

TYK2 Antibody - Images



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Western blot analysis of TYK2 in human small intestine tissue lysate with TYK2 antibody at (A) 1 and (B) 2 µg/mL

TYK2 Antibody - Background

TYK2 Antibody: TYK2 is a member of the Janus kinases (JAKs) protein families. TYK2 associates with the cytoplasmic domain of type I and type II cytokine receptors and promulgate cytokine signals by phosphorylating receptor subunits and is also a component of both the type I and type III interferon signaling pathways. As such, it may play a role in anti-viral immunity. A mutation in this gene has been associated with hyperimmunoglobulin E syndrome (HIES) - a primary immunodeficiency characterized by elevated serum immunoglobulin E.

TYK2 Antibody - References

Strobl B, Stoiber D, Sexl V, et al. Tyrosine kinase 2 (TYK2) in cytokine signalling and host immunity. Front. Biosci. 2011; 17:3214-32.