10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

TYK2 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5349

Product Information

Application	IHC-P, WB
Primary Accession	P29597
Other Accession	Q9R117
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	133650
Isotype	Rabbit IgG
Antigen Source	HUMAN

Additional Information

Gene ID	7297
Antigen Region	887-922
Other Names	Non-receptor tyrosine-protein kinase TYK2, TYK2
Dilution	IHC-P~~1:100~500 WB~~1:1000
Target/Specificity	This TYK2 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 887-922 amino acids from the C-terminal region of human TYK2.
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	TYK2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TYK2 (HGNC:12440)
Function	Non-membrane spanning protein tyrosine kinase 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). Involved in the oncostatin-M-mediated signaling pathway through both type I OSM receptor complex (heterodimers composed of LIFR and IL6ST) and type II OSM receptor complex (heterodimers composed of OSMR and IL6ST) (PubMed:9188471).

Tissue Location

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

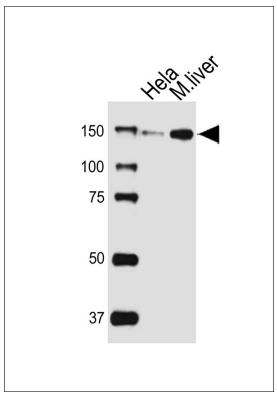
Background

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.

References

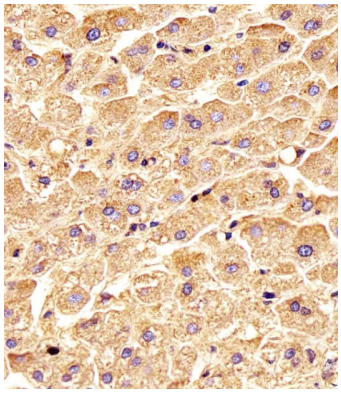
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Velazquez L.,et al.Cell 70:313-322(1992).
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Partanen J.,et al.Proc. Natl. Acad. Sci. U.S.A. 87:8913-8917(1990).
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Images



Western blot analysis of lysates from Hela cell line,mouse liver tissue lysate(from left to right), using TYK2 Antibody (C-term)(Cat. #AW5349). AW5349 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.Lysates at 20ug per lane.

Immunohistochemical analysis of paraffin-embedded H. liver section using TYK2 Antibody (C-term)(Cat#AW5349).



AW5349 was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

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