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TYK2 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20922c

Product Information

Application	WB, IHC-P, E
Primary Accession	P29597
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB50497
Calculated MW	133650

Additional Information

Gene ID	7297
Other Names	Non-receptor tyrosine-protein kinase TYK2, TYK2
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.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
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
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

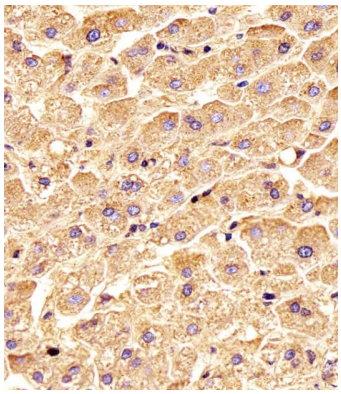
Background

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.

References

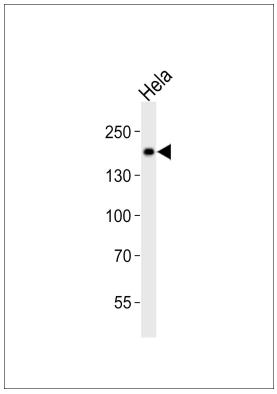
Firmbach-Kraft I.,et al.Oncogene 5:1329-1336(1990).
Velazquez L.,et al.Cell 70:313-322(1992).
Krolewski J.J.,et al.Oncogene 5:277-282(1990).
Partanen J.,et al.Proc. Natl. Acad. Sci. U.S.A. 87:8913-8917(1990).
Colamonici O.,et al.Mol. Cell. Biol. 14:8133-8142(1994).

Images



Immunohistochemical analysis of paraffin-embedded H. liver section using TYK2 Antibody (C-term)(Cat#AP20922c). AP20922c was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

Western blot analysis of lysate from Hela cell line, using TYK2 Antibody (C-term)(Cat. #AP20922c). AP20922c was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysate at 20ug.



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