

JAK1 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20699a

Product Information

Application WB, E Primary Accession P23458

Reactivity Human, Mouse

HostRabbitClonalityPolyclonalIsotypeRabbit IgGClone NamesRB43809Calculated MW133277

Additional Information

Gene ID 3716

Other Names Tyrosine-protein kinase JAK1, Janus kinase 1, JAK-1, JAK1A, JAK1B

Target/Specificity This JAK1 antibody is generated from a rabbit immunized with a KLH

conjugated synthetic peptide between 172-204 amino acids from the

N-terminal region of human JAK1.

Dilution WB~~1:1000 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 JAK1 Antibody (N-term) is for research use only and not for use in diagnostic

or therapeutic procedures.

Protein Information

Name JAK1

Synonyms |AK1A, |AK1B

Function Tyrosine kinase of the non-receptor type, involved in the

IFN-alpha/beta/gamma signal pathway (PubMed:16239216,

PubMed:<u>28111307</u>, PubMed:<u>32750333</u>, PubMed:<u>7615558</u>, PubMed:<u>8232552</u>). Kinase partner for the interleukin (IL)-2 receptor (PubMed:<u>11909529</u>) as well

as interleukin (IL)-10 receptor (PubMed:12133952). Kinase partner for the type I interferon receptor IFNAR2 (PubMed:16239216, PubMed:28111307, PubMed:32750333, PubMed:7615558, PubMed:8232552). In response to interferon-binding to IFNAR1-IFNAR2 heterodimer, phosphorylates and activates its binding partner IFNAR2, creating docking sites for STAT proteins (PubMed:7759950). Directly phosphorylates STAT proteins but also activates STAT signaling through the transactivation of other JAK kinases associated with signaling receptors (PubMed:16239216, PubMed:32750333, PubMed:8232552).

Cellular Location

Endomembrane system; Peripheral membrane protein. Note=Wholly

intracellular, possibly membrane associated

Tissue Location

Expressed at higher levels in primary colon tumors than in normal colon tissue. The expression level in metastatic colon tumors is comparable to the expression level in normal colon tissue

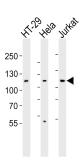
Background

Tyrosine kinase of the non-receptor type, involved in the IFN-alpha/beta/gamma signal pathway. Kinase partner for the interleukin (IL)-2 receptor.

References

Wilks A.F.,et al.Mol. Cell. Biol. 11:2057-2065(1991). Totoki Y.,et al.Submitted (MAR-2005) to the EMBL/GenBank/DDBJ databases. Gregory S.G.,et al.Nature 441:315-321(2006). Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases. Lee S.-T.,et al.Oncogene 8:3403-3410(1993).

Images



Western blot analysis of lysates from HT-29, Hela, Jurkat cell line (from left to right), using JAK1 Antibody (N-term)(Cat. #AP20699a). AP20699a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.

Citations

- In vitro-induced M2 type macrophages induces the resistance of prostate cancer cells to cytotoxic action of NK cells.
- Adipocytes affect castration-resistant prostate cancer cells to develop the resistance to cytotoxic action of NK cells with alterations of PD-L1/NKG2D ligand levels in tumor cells.
- Enhancing NK cell-mediated cytotoxicity to cisplatin-resistant lung cancer cells via MEK/Erk signaling inhibition,
- Radiation alters PD-L1/NKG2D ligand levels in lung cancer cells and leads to immune escape from NK cell cytotoxicity via IL-6-MEK/Erk signaling pathway.

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