

JIK Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51547**Specification**

JIK Antibody - Product Information

Application	WB, E
Primary Accession	O9H2K8
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	110 KDa

JIK Antibody - Additional Information**Gene ID** 51347**Other Names**

Serine/threonine-protein kinase TAO3, Cutaneous T-cell lymphoma-associated antigen HD-CL-09, CTCL-associated antigen HD-CL-09, Dendritic cell-derived protein kinase, JNK/SAPK-inhibitory kinase, Jun kinase-inhibitory kinase, Kinase from chicken homolog A, hKFC-A, Thousand and one amino acid protein 3, TAOK3, DPK, JIK, KDS, MAP3K18

Dilution

WB~~1:1000

E~~N/A

Format

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage

Store at -20 °C.Stable for 12 months from date of receipt

JIK Antibody - Protein Information**Name** TAOK3**Synonyms** DPK, JIK, KDS, MAP3K18**Function**

Serine/threonine-protein kinase that acts as a regulator of the p38/MAPK14 stress-activated MAPK cascade and of the MAPK8/JNK cascade. In response to DNA damage, involved in the G2/M transition DNA damage checkpoint by activating the p38/MAPK14 stress-activated MAPK cascade, probably by mediating phosphorylation of upstream MAP2K3 and MAP2K6 kinases. Inhibits basal activity of the MAPK8/JNK cascade and diminishes its activation in response to epidermal growth factor (EGF). Positively regulates canonical T cell receptor (TCR) signaling by preventing early PTPN6/SHP1-mediated inactivation of LCK, ensuring sustained TCR signaling that is required for optimal activation and differentiation of T cells (PubMed:<a

[30373850](http://www.uniprot.org/citations/30373850)). Phosphorylates PTPN6/SHP1 on 'Thr-394', leading to its polyubiquitination and subsequent proteasomal degradation (PubMed:[38166031](http://www.uniprot.org/citations/38166031)). Required for cell surface expression of metalloprotease ADAM10 on type 1 transitional B cells which is necessary for their NOTCH-mediated development into marginal zone B cells (By similarity). Also required for the NOTCH-mediated terminal differentiation of splenic conventional type 2 dendritic cells (By similarity). Positively regulates osteoblast differentiation by acting as an upstream activator of the JNK pathway (PubMed:[32807497](http://www.uniprot.org/citations/32807497)). Promotes JNK signaling in hepatocytes and positively regulates hepatocyte lipid storage by inhibiting beta-oxidation and triacylglycerol secretion while enhancing lipid synthesis (PubMed:[34634521](http://www.uniprot.org/citations/34634521)). Restricts age-associated inflammation by negatively regulating differentiation of macrophages and their production of pro-inflammatory cytokines (By similarity). Plays a role in negatively regulating the abundance of regulatory T cells in white adipose tissue (By similarity).

Cellular Location

Cytoplasm. Cell membrane; Peripheral membrane protein. Membrane raft. Lipid droplet. Note=Located primarily outside cell membrane rafts and remains outside upon canonical TCR ligation (PubMed:30373850). A small pool is detectable in cell membrane rafts in resting conditions but relocates outside the rafts upon TCR signaling (PubMed:30373850). Localizes to lipid droplets in hepatocytes (PubMed:34634521).

Tissue Location

Ubiquitously expressed at a low level, and highly expressed in peripheral blood leukocytes (PBLs), thymus, spleen, kidney, skeletal muscle, heart and liver.

JIK 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 Cytometry](#)
- [Cell Culture](#)

JIK Antibody - Images

JIK Antibody - Background

Serine/threonine-protein kinase that acts as a regulator of the p38/MAPK14 stress-activated MAPK cascade and of the MAPK8/JNK cascade. Acts as an activator of the p38/MAPK14 stress-activated MAPK cascade. In response to DNA damage, involved in the G2/M transition DNA damage checkpoint by activating the p38/MAPK14 stress-activated MAPK cascade, probably by mediating phosphorylation of upstream MAP2K3 and MAP2K6 kinases. Inhibits basal activity of MAPK8/JNK cascade and diminishes its activation in response epidermal growth factor (EGF).

JIK Antibody - References

Tassi E., et al. J. Biol. Chem. 274:33287-33295(1999).
Zhang W., et al. Biochem. Biophys. Res. Commun. 274:872-879(2000).
Yustein J.T., et al. Oncogene 22:6129-6141(2003).

Carter T.G.,et al.Submitted (AUG-1999) to the EMBL/GenBank/DDBJ databases.
Kalnine N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.