

# **JIK Antibody**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51547

## **Specification**

# **JIK Antibody - Product Information**

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW

WB, E
O9H2K8
Human, Mouse, Rat
Rabbit
Polyclonal
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

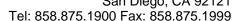
# **JIK Antibody - Protein Information**

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





href="http://www.uniprot.org/citations/30373850" target=" blank">30373850</a>). Phosphorylates PTPN6/SHP1 on 'Thr-394', leading to its polyubiquitination and subsequent proteasomal degradation (PubMed:<a href="http://www.uniprot.org/citations/38166031" target=" blank">38166031</a>). 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: <a href="http://www.uniprot.org/citations/32807497" target=" blank">32807497</a>). Promotes JNK signaling in hepatocytes and positively regulates hepatocyte lipid storage by inhibiting beta-oxidation and triacylglycerol secretion while enhancing lipid synthesis (PubMed: <a href="http://www.uniprot.org/citations/34634521" target=" blank">34634521</a>). 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 Cytomety
- 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/INK 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.