

JIK Antibody

Rabbit Polyclonal Antibody Catalog # ABV10604

Specification

JIK Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW WB, IP <u>Q9H2K8</u> <u>NP_057365.2</u> Human, Mouse Rabbit Polyclonal Rabbit IgG 105406

JIK Antibody - Additional Information

Gene ID 51347

Application & Usage

Western blotting (1:500 - 1:2500) and Immunoprecipitation. However, the optimal concentrations should be determined individually. The antibody recognizes the JIK/TAOK3 of human and mouse origins. Reactivity to other species has not been tested.

Other Names JIK, JNK/SAPK-Inhibitory Kinase, TAOK3, TAO Kinase 3, DPK, Dendritic cell derived protein kinase, MAP3K18

Target/Specificity JIK

Antibody Form Liquid

Appearance Colorless liquid

Formulation

100 μl affinity purified rabbit polyclonal antibody in phosphate-buffered saline (PBS) containing 30% glycerol, 1% BSA and 0.02% thimerosal.

Handling The antibody solution should be gently mixed before use.

Reconstitution & Storage -20 °C



Background Descriptions

Precautions

JIK Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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. 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).

Cellular Location

Cytoplasm. Cell membrane; Peripheral membrane protein. Note=Also localized to the peripheral cell membrane

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.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

JIK Antibody - Images

JIK Antibody - Background

JNK/SAPK-inhibitory kinase (JIK) is a serine/threonine kinase that belongs to the STE20 kinase family. The kinase domain of JIK is similar to the GCK-like subfamily of STE20 kinases, while its non-catalytic domain is similar to a Caenorhabditis elegans putative serine/threonine kinase, SULU. JIK inhibits c-Jun NH2-terminal kinase/stress-activated protein kinase (JNK/SAPK), which is activated by many types of cellular stresses and extracellular signals. JNK/SAPK regulates cell survival, apoptosis and proliferation in mouse development. JIK is negatively regulated by epidermal growth factor (EGF) and tyrosine kinase receptors. In unstimulated human T cells, JIK is cytoplasmic, whereas in the continuously dividing human T cells of Jurkat lymphoma, JIK is nuclear.