

# JLP/MAX binding protein Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP54804

#### Specification

# JLP/MAX binding protein Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW Physical State Immunogen Epitope Specificity Isotype <b>Purity</b> affinity purified by Protein A	IHC-P, IHC-F, IF, ICC, E <u>O60271</u> Rat, Dog Rabbit Polyclonal 146 KDa Liquid KLH conjugated synthetic peptide derived from human JLP/JIP-4 101-188/1321 IgG
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm. Cytoplasm, perinuclear region. Note: Perinuclear distribution in response to stress signals such as UV radiation.
SIMILARITY SUBUNIT	Belongs to the JIP scaffold family. Homooligomer. Interacts with MAX, MAPK8, MAPK9, MAPK10, MAPK14, MAP3K3, MYC, KNS2 and MAP2K4. Interaction with KNS2 is important in the formation of ternary complex with MAPK8. Interacts with NFKB1.
Post-translational modifications	Phosphorylated by MAPK8 and MAPK14 (By similarity). Phosphorylated upon DNA damage, probably by ATM or ATR.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	

#### **Background Descriptions**

JIP-4 is a 1,321 amino acid protein encoded by the human gene SPAG9. It contains a large N-terminal extracellular domain, a short transmembrane helical domain, and a cytoplasmic domain. There are 6 N-glycosylation sites, several phosphorylation sites for cAMP/cGMP-dependent protein kinase, protein kinase C, and casein kinase II, and 10 putative myristoylation sites. There is also a leucine zipper motif, with 6 leucine repeats, that may aid in dimerization since there is no upstream basic domain characteristic of DNA binding proteins. The JNK-interacting protein (JIP) group of scaffold proteins selectively mediates JNK signaling by aggregating specific components of the MAPK cascade to form a functional JNK signaling module. JIP-4 is a cytoplasmic, perinuclear protein that has eight known isoforms whose expression varies by tissue and disease state.

# JLP/MAX binding protein Polyclonal Antibody - Additional Information



Gene ID 9043

**Other Names** 

C-Jun-amino-terminal kinase-interacting protein 4, JIP-4, JNK-interacting protein 4, Cancer/testis antigen 89, CT89, Human lung cancer oncogene 6 protein, HLC-6, JNK-associated leucine-zipper protein, JLP, Mitogen-activated protein kinase 8-interacting protein 4, Proliferation-inducing protein 6, Protein highly expressed in testis, PHET, Sperm surface protein, Sperm-associated antigen 9, Sperm-specific protein, Sunday driver 1, SPAG9 (<a href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=14524" target="\_blank">HGNC:14524</a>)

Target/Specificity

Isoform 5 is expressed only in testis on the round spermatids of stage I, II and II. Isoform 5 is absent in spermatogonia and spermatocyte. Isoform 3 is expressed in testis. Isoform 4 is expressed in testis and in acute myeloid leukemia (AML) patients.

Dilution

<span class ="dilution\_IHC-P">IHC-P~~N/A</span><br \><span class ="dilution\_IHC-F">IHC-F~~N/A</span><br \><span class ="dilution\_IF">IF~~1:50~200</span><br \><span class ="dilution\_ICC">ICC~~N/A</span><br \><span class ="dilution\_E">E~~N/A</span>

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

# JLP/MAX binding protein Polyclonal Antibody - Protein Information

Name SPAG9 (HGNC:14524)

Function

The JNK-interacting protein (JIP) group of scaffold proteins selectively mediates JNK signaling by aggregating specific components of the MAPK cascade to form a functional JNK signaling module (PubMed:<a href="http://www.uniprot.org/citations/14743216" target="\_blank">14743216</a>). Regulates lysosomal positioning by acting as an adapter protein which links PIP4P1-positive lysosomes to the dynein- dynactin complex (PubMed:<a

href="http://www.uniprot.org/citations/29146937" target="\_blank">29146937</a>). Assists PIKFYVE selective functionality in microtubule-based endosome-to-TGN trafficking (By similarity).

**Cellular Location** 

Cytoplasm {ECO:0000250|UniProtKB:Q58A65}. Cytoplasm, perinuclear region {ECO:0000250|UniProtKB:Q58A65}. Lysosome membrane. Note=Perinuclear distribution in response to stress signals such as UV radiation {ECO:0000250|UniProtKB:Q58A65}

**Tissue Location** 

Expressed only in testis on the round spermatids of stage I, II and II. Absent in spermatogonia and spermatocyte [Isoform 3]: Expressed in testis.

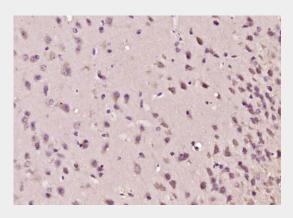
# JLP/MAX binding protein Polyclonal Antibody - Protocols



Provided below are standard protocols that you may find useful for product applications.

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

## JLP/MAX binding protein Polyclonal Antibody - Images



Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (JLP MAX binding protein) Polyclonal Antibody, Unconjugated (bs-12270R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.