

# JAKMIP1 Antibody

Catalog # ASC11593

# **Product Information**

**Application** WB, E **Primary Accession** Q96N16

Other Accession NP\_653321, 21389505
Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype IgG
Calculated MW 73209
Concentration (mg/ml) 1 mg/mL
Conjugate Unconjugated

**Application Notes** JAKMIP1 antibody can be used for detection of JAKMIP1 by Western blot at 1 -

2 [g/mL.

## **Additional Information**

**Gene ID** 152789

Other Names Janus kinase and microtubule-interacting protein 1, GABA-B receptor-binding

protein, Multiple alpha-helices and RNA-linker protein 1, Marlin-1, JAKMIP1,

GABABRBP, JAMIP1, MARLIN1

Target/Specificity JAKMIP1; Multiple isoforms of JAKMIP1 are known to exist. JAKMIP1 antibody

is predicted to not cross-react with JAKMIP2.

**Reconstitution & Storage** JAKMIP1 antibody can be stored at 4°C for three months and -20°C, stable for

up to one year.

**Precautions** JAKMIP1 Antibody is for research use only and not for use in diagnostic or

therapeutic procedures.

### **Protein Information**

Name JAKMIP1

Synonyms GABABRBP, JAMIP1, MARLIN1

**Function** Associates with microtubules and may play a role in the

microtubule-dependent transport of the GABA-B receptor. May play a role in JAK1 signaling and regulate microtubule cytoskeleton rearrangements.

**Cellular Location** Cytoplasm, cytoskeleton. Membrane; Peripheral membrane protein.

Note=Colocalizes with the microtubule network Localizes to the cell body and neurites of hippocampal neurons where it accumulates in granules. Localizes

to the tail and to a lower extent to the head of sperm cells

#### **Tissue Location**

Predominantly expressed in neural tissues and lymphoid cells (at protein level). Isoform 2, isoform 3 and isoform 4 are specifically expressed in brain and retina. Isoform 1 and isoform 5 are also detected in liver, lung and skeletal muscle. Also detected in testis and to a lower extent spleen and intestine

# **Background**

JAKMIP1 Antibody: JAKMIP1, also known as Marlin-1, is a highly-conserved vertebrate-specific microtubule-associated protein that plays a role in JAK1 signaling and regulate microtubule cytoskeleton rearrangements. JAKMIP1 is expressed predominantly in neuronal and lymphoid cells and colocalizes with microtubules. Multiple isoforms of JAKMIP1 are known to exist: isoforms 1 and 5 are also expressed in liver, lung and skeletal muscle, while isoforms 2-4 are specifically expressed in brain and retina. JAKMIP1 participates in polarized secretion in lymphocytes and it has been suggested to be a novel effector memory gene restraining T cell-mediated cytotoxicity. Dysregulation of JAKMIP1 gene expression is associated with genetic conditions linked to autism in humans.

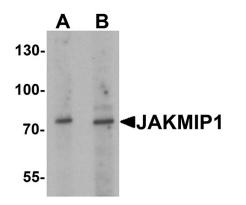
## References

Costa V, Conte I, Ziviello C, et al. Identification and expression analysis of novel Jakmip1 transcripts. Gene 2007; 402:1-8.

Vidal RL, Fuentes P, Valenzuela JI, et al. RNA interference of Marlin-1/Jakmip1 results in abnormal morphogenesis and migration of cortical pyramidal neurons. Mol. Cell Neurosci. 2012; epub. Libri V, Schulte D, Van Stijn A et al. Jakmip1 is expressed upon T cell differentiation and has an inhibitory function in cytotoxic T lymphocytes. J. Immunol. 2008; 181:5847-56

Bill BR, Geschwind DH. Genetic advances in autism: heterogeneity and convergence on shared pathways. Curr. Opin. Genet. Dev. 2009; 19:271-8.

# **Images**



Western blot analysis of JAKMIP1 in rat brain tissue lysate with JAKMIP1 antibody at (A) 1 and (B) 2 µg/mL

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