

JAKMIP2 (B-8): sc-393643

BACKGROUND

JAKMIP2 (janus kinase and microtubule-interacting protein 2), also known as NECC1 (neuroendocrine long coiled-coil protein 1), CTCL tumor antigen HD-CL-04, JAMIP2 or KIAA0555, is a 810 amino acid protein belonging to the JAKMIP family. Localizing to the Golgi apparatus, JAKMIP2 is highly expressed in brain, with moderate levels of expression found in thymus, spleen and lung. Existing as three alternatively spliced isoforms, the gene encoding JAKMIP2 maps to human chromosome 5q32 and mouse chromosome 18 B3. Chromosome 5 contains 181 million base pairs and comprises nearly 6% of the human genome. Deletion of the p arm of chromosome 5 leads to Cri du chat syndrome, while deletion of the q arm of chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

REFERENCES

1. Edwards, S.J., et al. 1997. The mutational spectrum in Treacher Collins syndrome reveals a predominance of mutations that create a premature-termination codon. *Am. J. Hum. Genet.* 60: 515-524.
2. McDaniel, L.D., et al. 1997. Confirmation of homozygosity for a single nucleotide substitution mutation in a Cockayne syndrome patient using monoallelic mutation analysis in somatic cell hybrids. *Hum. Mutat.* 10: 317-321.
3. Crawford, M.J., et al. 1997. Human and murine PTX1/Ptx1 gene maps to the region for Treacher Collins syndrome. *Mamm. Genome* 8: 841-845.
4. Finch, R., et al. 2005. Familial adenomatous polyposis and mental retardation caused by a *de novo* chromosomal deletion at 5q15-q22: report of a case. *Dis. Colon Rectum* 48: 2148-2152.
5. Lae, M., et al. 2007. Global gene expression profiling of PAX-FKHR fusion-positive alveolar and PAX-FKHR fusion-negative embryonal rhabdomyosarcomas. *J. Pathol.* 212: 143-151.
6. Anindya, R., et al. 2007. Damage-induced ubiquitylation of human RNA polymerase II by the ubiquitin ligase Nedd4, but not Cockayne syndrome proteins or BRCA1. *Mol. Cell* 28: 386-397.
7. Vera-Carbonell, A., et al. 2009. Characterization of a *de novo* complex chromosomal rearrangement in a patient with Cri-du-chat and trisomy 5p syndromes. *Am. J. Med. Genet. A* 149A: 2513-2521.
8. Sazawal, S., et al. 2009. Haematological & molecular profile of acute myelogenous leukaemia in India. *Indian J. Med. Res.* 129: 256-261.

CHROMOSOMAL LOCATION

Genetic locus: JAKMIP2 (human) mapping to 5q32; Jakmip2 (mouse) mapping to 18 B3.

SOURCE

JAKMIP2 (B-8) is a mouse monoclonal antibody raised against amino acids 377-416 mapping within an internal region of JAKMIP2 of human origin.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PRODUCT

Each vial contains 200 µg IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

JAKMIP2 (B-8) is recommended for detection of JAKMIP2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

JAKMIP2 (B-8) is also recommended for detection of JAKMIP2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for JAKMIP2 siRNA (h): sc-92029, JAKMIP2 siRNA (m): sc-146317, JAKMIP2 shRNA Plasmid (h): sc-92029-SH, JAKMIP2 shRNA Plasmid (m): sc-146317-SH, JAKMIP2 shRNA (h) Lentiviral Particles: sc-92029-V and JAKMIP2 shRNA (m) Lentiviral Particles: sc-146317-V.

Molecular Weight of JAKMIP2 isoforms 1/2/3: 95/92/96 kDa.

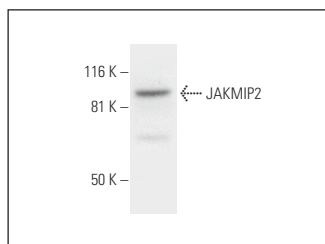
Positive Controls: SK-N-MC cell lysate: sc-2237.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



JAKMIP2 (B-8): sc-393643. Western blot analysis of JAKMIP2 expression in SK-N-MC whole cell lysate.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.