

JAKMIP3 (K-15): sc-168224

BACKGROUND

JAKMIP3 (janus kinase and microtubule-interacting protein 3), also known as C10orf14 or NECC2 (neuroendocrine long coiled-coil protein 2), is an 844 amino acid protein that belongs to the JAKMIP family. Localizing to the Golgi apparatus, JAKMIP3 is expressed in the central nervous system, as well as endocrine tissue, heart, testis and prostate. Existing as two alternatively spliced isoforms, the gene encoding JAKMIP3 maps to human chromosome 10q26.3 and mouse chromosome 7 F4. Spanning nearly 135 million base pairs, chromosome 10 makes up approximately 4.5% of total DNA in cells and encodes nearly 1,200 genes. Several protein-coding genes, including those that encode for chemokines, cadherins, excision repair proteins, early growth response factors (Egrs) and fibroblast growth receptors (FGFRs), are located on chromosome 10. Defects in some of the genes that map to chromosome 10 are associated with Charcot-Marie Tooth disease, Jackson-Weiss syndrome, Usher syndrome, nonsyndromic deafness, Wolman's syndrome, Cowden syndrome, multiple endocrine neoplasia type 2 and porphyria.

REFERENCES

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3. Berger, P., et al. 2002. Molecular cell biology of Charcot-Marie-Tooth disease. *Neurogenetics* 4: 1-15.
4. Teresi, R.E., et al. 2007. Cowden syndrome-affected patients with PTEN promoter mutations demonstrate abnormal protein translation. *Am. J. Hum. Genet.* 81: 756-767.
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6. Yin, Y. and Shen, W.H. 2008. PTEN: a new guardian of the genome. *Oncogene* 27: 5443-5453.
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CHROMOSOMAL LOCATION

Genetic locus: JAKMIP3 (human) mapping to 10q26.3; Jakmip3 (mouse) mapping to 7 F4.

SOURCE

JAKMIP3 (K-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of JAKMIP3 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-168224 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

JAKMIP3 (K-15) is recommended for detection of JAKMIP3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with JAKMIP2.

JAKMIP3 (K-15) is also recommended for detection of JAKMIP3 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for 6330417G02Rik siRNA (m): sc-140440, 6330417G02Rik shRNA Plasmid (m): sc-140440-SH and 6330417G02Rik shRNA (m) Lentiviral Particles: sc-140440-V.

Molecular Weight of JAKMIP3: isoforms 1/2: 99/49 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.