

KIAA0195 (D-18): sc-139373

BACKGROUND

KIAA0195, also known as TMEM94, is a ubiquitously expressed 1,356 amino acid multi-pass membrane protein. KIAA0195 is post-translationally phosphorylated at several serine residues and is alternatively spliced into two isoforms. KIAA0195 is also glycosylated at several residues near its C-terminus. The gene encoding KIAA0195 maps to human chromosome 17, which makes up over 2.5% of the human genome with about 81 million bases encoding over 1,200 genes. Two key tumor suppressor genes are associated with chromosome 17, namely, p53 and BRCA1. Tumor suppressor p53 is necessary for maintenance of cellular genetic integrity by moderating cell fate through DNA repair versus cell death. Malfunction or loss of p53 expression is associated with malignant cell growth and Li-Fraumeni syndrome. Like p53, BRCA1 is directly involved in DNA repair, though specifically it is recognized as a genetic determinant of early onset breast cancer and predisposition to cancers of the ovary, colon, prostate gland and fallopian tubes.

REFERENCES

- Nagase, T., Seki, N., Ishikawa, K., Tanaka, A. and Nomura, N. 1996. Prediction of the coding sequences of unidentified human genes. V. The coding sequences of 40 new genes (KIAA0161-KIAA0200) deduced by analysis of cDNA clones from human cell line KG-1. *DNA Res.* 3: 17-24.
- Nusbaum, R., et al. 2006-2007. Susceptibility to breast cancer: hereditary syndromes and low penetrance genes. *Breast Dis.* 27: 21-50.
- Dann, R.B., et al. 2007. Strategies for ovarian cancer prevention. *Obstet. Gynecol. Clin. North Am.* 34: 667-686.
- Tai, Y.C., et al. 2007. Breast cancer risk among male BRCA1 and BRCA2 mutation carriers. *J. Natl. Cancer Inst.* 99: 1811-1814.
- Yan, J., et al. 2007. Blimp-1 regulates cell growth through repression of p53 transcription. *Proc. Natl. Acad. Sci. USA* 104: 1841-1846.
- Daub, H., Olsen, J.V., Bairlein, M., Gnad, F., Oppermann, F.S., Körner, R., Greff, Z., Kéri, G., Stemmann, O. and Mann, M. 2008. Kinase-selective enrichment enables quantitative phosphoproteomics of the kinome across the cell cycle. *Mol. Cell* 31: 438-448.
- Oppermann, F.S., Gnad, F., Olsen, J.V., Hornberger, R., Greff, Z., Kéri, G., Mann, M. and Daub, H. 2009. Large-scale proteomics analysis of the human kinome. *Mol. Cell. Proteomics* 8: 1751-1764.

CHROMOSOMAL LOCATION

Genetic locus: KIAA0195 (human) mapping to 17q25.1; 2310067B10Rik (mouse) mapping to 11 E2.

SOURCE

KIAA0195 (D-18) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of KIAA0195 of human origin.

STORAGE

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

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-139373 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

KIAA0195 (D-18) is recommended for detection of KIAA0195 of human origin and mKIAA0195 of mouse origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

KIAA0195 (D-18) is also recommended for detection of KIAA0195 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for KIAA0195 siRNA (h): sc-94043, mKIAA0195 siRNA (m): sc-149454, KIAA0195 shRNA Plasmid (h): sc-94043-SH, mKIAA0195 shRNA Plasmid (m): sc-149454-SH, KIAA0195 shRNA (h) Lentiviral Particles: sc-94043-V and mKIAA0195 shRNA (m) Lentiviral Particles: sc-149454-V.

Molecular Weight of KIAA0195 isoforms: 151/154 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.