

KIAA0753 (B-3): sc-398879

BACKGROUND

KIAA0753 is a 967 amino acid protein that contains one coiled coil domain and exists as two alternatively spliced isoforms. The gene encoding KIAA0753 maps to human chromosome 17, which comprises over 2.5% of the human genome, contains approximately 81 million bases and encodes 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 it is specifically recognized as a genetic determinant of early onset breast cancer and predisposition to cancers of the ovary, colon, prostate gland and fallopian tubes. Chromosome 17 is also linked to neurofibromatosis, a condition characterized by neural and epidermal lesions, and dysregulated Schwann cell growth. Alexander disease, Birt-Hogg-Dube syndrome and Canavan disease are also associated with chromosome 17.

REFERENCES

1. Welsch, M.J., et al. 2005. Birt-Hogg-Dube syndrome. *Int. J. Dermatol.* 44: 668-673.
2. Nusbaum, R., et al. 2006-2007. Susceptibility to breast cancer: hereditary syndromes and low penetrance genes. *Breast Dis.* 27: 21-50.
3. Al-Dirbashi, O.Y., et al. 2007. Quantification of N-acetylaspartic acid in urine by LC-MS/MS for the diagnosis of Canavan disease. *J. Inher. Metab. Dis.* 30: 612.

CHROMOSOMAL LOCATION

Genetic locus: KIAA0753 (human) mapping to 17p13.2; 4933427D14Rik (mouse) mapping to 11 B4.

SOURCE

KIAA0753 (B-3) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 341-373 within an internal region of KIAA0753 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

KIAA0753 (B-3) is available conjugated to agarose (sc-398879 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398879 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398879 PE), fluorescein (sc-398879 FITC), Alexa Fluor® 488 (sc-398879 AF488), Alexa Fluor® 546 (sc-398879 AF546), Alexa Fluor® 594 (sc-398879 AF594) or Alexa Fluor® 647 (sc-398879 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398879 AF680) or Alexa Fluor® 790 (sc-398879 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-398879 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

APPLICATIONS

KIAA0753 (B-3) is recommended for detection of KIAA0753 of human origin, 4933427D14Rik of mouse origin and the corresponding rat homolog 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).

Suitable for use as control antibody for KIAA0753 siRNA (h): sc-93808, 4933427D14Rik siRNA (m): sc-140316, KIAA0753 shRNA Plasmid (h): sc-93808-SH, 4933427D14Rik shRNA Plasmid (m): sc-140316-SH, KIAA0753 shRNA (h) Lentiviral Particles: sc-93808-V and 4933427D14Rik shRNA (m) Lentiviral Particles: sc-140316-V.

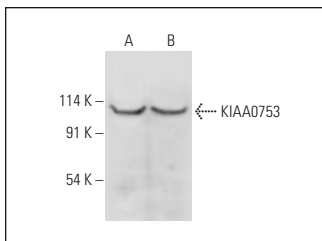
Molecular Weight of KIAA0753 isoforms: 109/75 kDa.

Positive Controls: A-10 cell lysate: sc-3806, RT-4 whole cell lysate: sc-364257 or K-562 whole cell lysate: sc-2203.

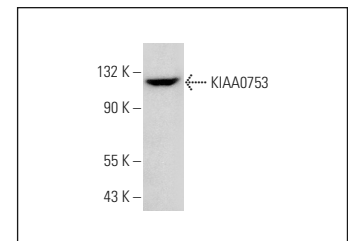
RECOMMENDED SUPPORT REAGENTS

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 A/G PLUS-Agarose: sc-2003 (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



KIAA0753 (B-3): sc-398879. Western blot analysis of KIAA0753 expression in K-562 (A) and RT-4 (B) whole cell lysates.



KIAA0753 (B-3): sc-398879. Western blot analysis of KIAA0753 expression in A-10 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.

RESEARCH USE

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