

KIAA2013 (G-10): sc-390829

BACKGROUND

KIAA2013 is a 634 amino acid single-pass type I membrane protein that exists as 2 alternatively spliced isoforms and is encoded by a gene that maps to human chromosome 1p36.22. Chromosome 1 is the largest human chromosome spanning about 260 million base pairs and making up 8% of the human genome. There are about 3,000 genes on chromosome 1, and considering the great number of genes there are also a large number of diseases associated with chromosome 1. Notably, the rare aging disease Hutchinson-Gilford progeria is associated with the LMNA gene which encodes Lamin A. When defective, the LMNA gene product can build up in the nucleus and cause characteristic nuclear blebs. The mechanism of rapidly enhanced aging is unclear and is a topic of continuing exploration. The MUTYH gene is located on chromosome 1 and is partially responsible for familial adenomatous polyposis. Stickler syndrome, Parkinsons, Gaucher disease and Usher syndrome are also associated with chromosome 1. A breakpoint has been identified in 1q which disrupts the DISC1 gene and is linked to schizophrenia. Aberrations in chromosome 1 are found in a variety of cancers including head and neck cancer, malignant melanoma and multiple myeloma.

REFERENCES

1. Watson, M.L., et al. 1990. Genomic organization of the selectin family of leukocyte adhesion molecules on human and mouse chromosome 1. *J. Exp. Med.* 172: 263-272.
2. Blackwood, D.H., et al. 2001. Schizophrenia and affective disorders— cosegregation with a translocation at chromosome 1q42 that directly disrupts brain-expressed genes: clinical and P300 findings in a family. *Am. J. Hum. Genet.* 69: 428-433.

CHROMOSOMAL LOCATION

Genetic locus: KIAA2013 (human) mapping to 1p36.22; 2510039018Rik (mouse) mapping to 4 E2.

SOURCE

KIAA2013 (G-10) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 100-123 within an internal region of KIAA2013 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

KIAA2013 (G-10) is available conjugated to agarose (sc-390829 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390829 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390829 PE), fluorescein (sc-390829 FITC), Alexa Fluor® 488 (sc-390829 AF488), Alexa Fluor® 546 (sc-390829 AF546), Alexa Fluor® 594 (sc-390829 AF594) or Alexa Fluor® 647 (sc-390829 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390829 AF680) or Alexa Fluor® 790 (sc-390829 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-390829 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

KIAA2013 (G-10) is recommended for detection of KIAA2013 of human origin, 2510039018Rik of mouse origin and RGD1305350 of rat 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).

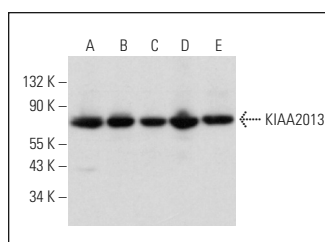
KIAA2013 (G-10) is also recommended for detection of KIAA2013 in additional species, including bovine.

Suitable for use as control antibody for KIAA2013 siRNA (h): sc-88650, 2510039018Rik siRNA (m): sc-108769, KIAA2013 shRNA Plasmid (h): sc-88650-SH, 2510039018Rik shRNA Plasmid (m): sc-108769-SH, KIAA2013 shRNA (h) Lentiviral Particles: sc-88650-V and 2510039018Rik shRNA (m) Lentiviral Particles: sc-108769-V.

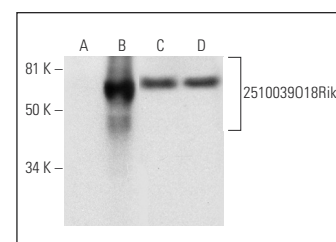
Molecular Weight of KIAA2013 isoforms: 69/73 kDa.

Positive Controls: 2510039018Rik (m): 293T Lysate: sc-124870, Jurkat whole cell lysate: sc-2204 or HeLa whole cell lysate: sc-2200.

DATA



KIAA2013 (G-10): sc-390829. Western blot analysis of KIAA2013 expression in Hep G2 (A), RAW 264.7 (B), M1 (C), Neuro-2A (D) and C6 (E) whole cell lysates.



KIAA2013 (G-10): sc-390829. Western blot analysis of 2510039018Rik expression in non-transfected 293T: sc-117752 (A), mouse 2510039018Rik transfected 293T: sc-124870 (B), Jurkat (C) and HeLa (D) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Tang, X., et al. 2021. Hsa_circ_0102171 aggravates the progression of cervical cancer through targeting miR-4465/CREBRF axis. *J. Cell. Physiol.* 236: 4973-4984.

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 for detailed protocols and support products.

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