SANTA CRUZ BIOTECHNOLOGY, INC.

C19orf53 (H-1): sc-515133

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

C19orf53 (chromosome 19 open reading frame 53) is a 99 amino acid protein that is encoded by a gene located on human chromosome 19. Chromosome 19 consists of approximately 63 million bases and makes up over 2% of human genomic DNA. Chromosome 19 includes a diversity of interesting genes and is recognized for having the greatest gene density of the human chromosomes. It is the genetic home for a number of immunoglobulin superfamily members including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG family, and Fcα receptors. Key genes for eye color and hair color also map to chromosome 19. Peutz-Jeghers syndrome, spinocerebellar ataxia type 6, the stroke disorder CADASIL, hypercholesterolemia and Insulin-dependent diabetes have been linked to chromosome 19. Translocations with chromosome 19 and chromosome 14 can be seen in some lymphoproliferative disorders and typically involve the proto-oncogene Bcl3.

REFERENCES

1. Zimmermann, W., et al. 1988. Chromosomal localization of the carcinoembryonic antigen gene family and differential expression in various tumors. Cancer Res. 48: 2550-2554.
2. LaPoint, S.F., et al. 2000. Cerebral autosomal dominant arteriopathy with subcortical infarcts and leukoencephalopathy (CADASIL). Adv. Anat. Pathol. 7: 307-321.
3. Trettel, F., et al. 2000. A fine physical map of the CACNA1A gene region on 19p13.1-p13.2 chromosome. Gene 241: 45-50.

CHROMOSOMAL LOCATION

Genetic locus: C19orf53 (human) mapping to 19p13.2; D8Ertd738e (mouse) mapping to 8 C3.

SOURCE

C19orf53 (H-1) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 1-20 at the N-terminus of C19orf53 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

C19orf53 (H-1) is available conjugated to agarose (sc-515133 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-515133 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515133 PE), fluorescein (sc-515133 FITC), Alexa Fluor® 488 (sc-515133 AF488), Alexa Fluor® 546 (sc-515133 AF546), Alexa Fluor® 594 (sc-515133 AF594) or Alexa Fluor® 647 (sc-515133 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515133 AF680) or Alexa Fluor® 790 (sc-515133 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-515133 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

C19orf53 (H-1) is recommended for detection of C19orf53 of human origin, D8Ertd738e of mouse origin and LOC288913 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).

Suitable for use as control antibody for C19orf53 siRNA (h): sc-97415, D8Ertd738e siRNA (m): sc-142855, C19orf53 shRNA Plasmid (h): sc-97415-SH, D8Ertd738e shRNA Plasmid (m): sc-142855-SH, C19orf53 shRNA (h) Lentiviral Particles: sc-97415-V and D8Ertd738e shRNA (m) Lentiviral Particles: sc-142855-V.

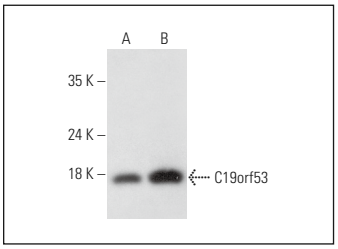
Molecular Weight of C19orf53: 11 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206 or PC-3 cell lysate: sc-2220.

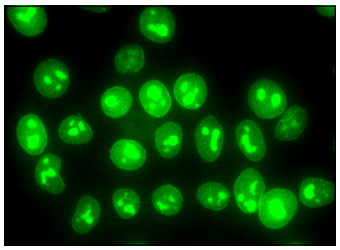
RECOMMENDED SUPPORT REAGENTS

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



C19orf53 (H-1): sc-515133. Western blot analysis of C19orf53 expression in MCF7 (**A**) and PC-3 (**B**) whole cell lysates.



C19orf53 (H-1): sc-515133. Immunofluorescence staining of formalin-fixed HeLa cells showing nucleolar and nuclear localization.

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.