

ICB1 (H-8): sc-515413

BACKGROUND

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
3. Weise, A., et al. 2005. New insights into the evolution of chromosome 1. *Cytogenet. Genome Res.* 108: 217-222.

CHROMOSOMAL LOCATION

Genetic locus: THEMIS2 (human) mapping to 1p35.3.

SOURCE

ICB1 (H-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 218-240 within an internal region of ICB1 of human origin.

PRODUCT

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

ICB1 (H-8) is available conjugated to agarose (sc-515413 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515413 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515413 PE), fluorescein (sc-515413 FITC), Alexa Fluor® 488 (sc-515413 AF488), Alexa Fluor® 546 (sc-515413 AF546), Alexa Fluor® 594 (sc-515413 AF594) or Alexa Fluor® 647 (sc-515413 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515413 AF680) or Alexa Fluor® 790 (sc-515413 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-515413 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

ICB1 (H-8) is recommended for detection of ICB1 isoforms 1, 3 and 5 of human 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 ICB1 siRNA (h): sc-88329, ICB1 shRNA Plasmid (h): sc-88329-SH and ICB1 shRNA (h) Lentiviral Particles: sc-88329-V.

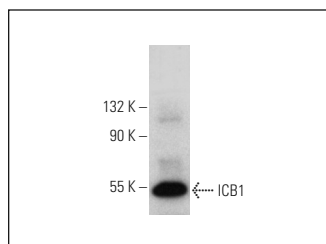
Molecular Weight of ICB1 isoforms 1/2/3/4/5/6: 72/29/56/14/58/50 kDa.

Positive Controls: MDA-MB-231 cell lysate: sc-2232.

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



ICB1 (H-8): sc-515413. Western blot analysis of ICB1 expression in MDA-MB-231 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.

PROTOCOLS

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

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