

FOXRED2 (B-10): sc-515260

BACKGROUND

FOXRED2 (FAD-dependent oxidoreductase domain containing 2) is a 684 amino acid protein that exists as multiple alternatively spliced isoforms. The gene encoding FOXRED2 maps to human chromosome 22q12.3, which houses over 500 genes and is the second smallest human chromosome. Mutations in several of the genes that map to chromosome 22 are involved in the development of Phelan-McDermid syndrome, Neurofibromatosis type 2, autism and schizophrenia. Additionally, translocations between chromosomes 9 and 22 may lead to the formation of the Philadelphia Chromosome and the subsequent production of the novel fusion protein Bcr-Abl, a potent cell proliferation activator found in several types of leukemias.

REFERENCES

1. Gilbert, F. 1998. Disease genes and chromosomes: disease maps of the human genome. *Chromosome 22. Genet. Test.* 2: 89-97.
2. Schwab, S.G. and Wildenauer, D.B. 1999. Chromosome 22 workshop report. *Am. J. Med. Genet.* 88: 276-278.
3. Tsilchorozidou, T., et al. 2004. Constitutional rearrangements of chromosome 22 as a cause of neurofibromatosis 2. *J. Med. Genet.* 41: 529-534.
4. Arinami, T. 2006. Analyses of the associations between the genes of 22q11 deletion syndrome and schizophrenia. *J. Hum. Genet.* 51: 1037-1045.
5. Paylor, R., et al. 2006. Tbx1 haploinsufficiency is linked to behavioral disorders in mice and humans: implications for 22q11 deletion syndrome. *Proc. Natl. Acad. Sci. USA* 103: 7729-7734.
6. Zheng, X., et al. 2006. Bcr and its mutants, the reciprocal t(9;22)-associated Abl/Bcr fusion proteins, differentially regulate the cytoskeleton and cell motility. *BMC Cancer* 6: 262.

CHROMOSOMAL LOCATION

Genetic locus: FOXRED2 (human) mapping to 22q12.3; Foxred2 (mouse) mapping to 15 E1.

SOURCE

FOXRED2 (B-10) is a mouse monoclonal antibody raised against amino acids 190-283 mapping within an internal region of FOXRED2 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.

FOXRED2 (B-10) is available conjugated to agarose (sc-515260 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515260 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515260 PE), fluorescein (sc-515260 FITC), Alexa Fluor® 488 (sc-515260 AF488), Alexa Fluor® 546 (sc-515260 AF546), Alexa Fluor® 594 (sc-515260 AF594) or Alexa Fluor® 647 (sc-515260 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515260 AF680) or Alexa Fluor® 790 (sc-515260 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

FOXRED2 (B-10) is recommended for detection of FOXRED2 of mouse, rat and 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 FOXRED2 siRNA (h): sc-75054, FOXRED2 siRNA (m): sc-145231, FOXRED2 shRNA Plasmid (h): sc-75054-SH, FOXRED2 shRNA Plasmid (m): sc-145231-SH, FOXRED2 shRNA (h) Lentiviral Particles: sc-75054-V and FOXRED2 shRNA (m) Lentiviral Particles: sc-145231-V.

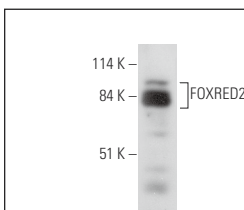
Molecular Weight of FOXRED2: 78 kDa.

Positive Controls: MDA-MB-435S whole cell lysate: sc-364184 or MH-S whole cell lysate: sc-364785.

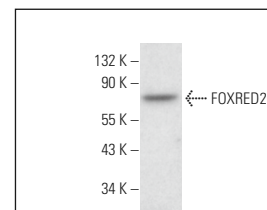
RECOMMENDED SUPPORT REAGENTS

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



FOXRED2 (B-10): sc-515260. Western blot analysis of FOXRED2 expression in MDA-MB-435S whole cell lysate.



FOXRED2 (B-10): sc-515260. Western blot analysis of FOXRED2 expression in MH-S 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.