

BinCARD (N-15): sc-241924

BACKGROUND

BinCARD (Bcl10-interacting CARD protein) is a 228 amino acid protein that exists as two alternatively spiced isoforms. BinCARD localizes to nucleus and is expressed in ovary, testis, placenta, skeletal muscle, kidney, lung, heart, liver, thymus and brain. Containing a CARD domain, BinCARD plays a role in inhibiting the effects of Bcl10-induced activation of NF κ B possibly by inhibiting the phosphorylation of Bcl10 in a CARD-dependent manner. The BinCARD gene maps to chromosome 9q22.31. Chromosome 9 consists of about 145 million bases and 4% of the human genome and encodes nearly 900 genes. Notably, chromosome 9 encompasses the largest interferon family gene cluster. Considered to play a role in gender determination, deletion of the distal portion of 9p can lead to development of male to female sex reversal, the phenotype of a female with a male X,Y genotype. Hereditary hemorrhagic telangiectasia, which is characterized by harmful vascular defects, is associated with the chromosome 9 gene encoding endoglin protein, ENG. Familial dysautonomia is also associated with chromosome 9 though through the gene IKAP.

REFERENCES

1. Strausberg, R.L., et al. 2002. Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences. Proc. Natl. Acad. Sci. USA 99: 16899-16903.
2. Woo, H.N., et al. 2004. Inhibition of Bcl10-mediated activation of NF- κ B by BinCARD, a Bcl10-interacting CARD protein. FEBS Lett. 578: 239-244.
3. Ota, T., et al. 2004. Complete sequencing and characterization of 21,243 full-length human cDNAs. Nat. Genet. 36: 40-45.
4. Humphray, S.J., et al. 2004. DNA sequence and analysis of human chromosome 9. Nature 429: 369-374.
5. Wang, P., et al. 2006. Cloning of a novel human caspase-9 splice variant containing only the CARD domain. Life Sci. 79: 934-940.

CHROMOSOMAL LOCATION

Genetic locus: C9orf89 (human) mapping to 9q22.31; 1110007C09Rik (mouse) mapping to 13 A5.

SOURCE

BinCARD (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of BinCARD of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-241924 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

BinCARD (N-15) is recommended for detection of BinCARD of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

BinCARD (N-15) is also recommended for detection of BinCARD in additional species, including bovine and porcine.

Suitable for use as control antibody for BinCARD siRNA (h): sc-92507, BinCARD siRNA (m): sc-141706, BinCARD shRNA Plasmid (h): sc-92507-SH, BinCARD shRNA Plasmid (m): sc-141706-SH, BinCARD shRNA (h) Lentiviral Particles: sc-92507-V and BinCARD shRNA (m) Lentiviral Particles: sc-141706-V.

Molecular Weight of BinCARD: 26 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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

PROTOCOLS

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