SANTA CRUZ BIOTECHNOLOGY, INC.

SDCCAG3 (E-2): sc-398909

BACKGROUND

SDCCAG3 (serologically defined colon cancer antigen 3) is a 435 amino acid protein that belongs to the SDCCAG3 family. Localizing to cytoplasm, the SDCCAG3 protein may be involved in modulation of TNF response, as well as in presentation of TNFRSF1A on the cell surface. The SDCCAG3 protein contains a region similar to the coiled-coil domain of the myosin tail. The same domain is present in the proteins related to the organelles/proteins trafficking, such as kinesin, Golgin-160 and dynein. Existing as four alternatively spliced isoforms, the SDCCAG3 gene is conserved in chimpanzee, bovine, mouse, rat, chicken and zebrafish, and maps to human chromosome 9q34.3. Chromosome 9 consists of about 145 million bases and 4% of the human genome and encodes nearly 900 genes. 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 IKBKAP. Chromosome 9 is partnered with chromosome 22 in the translocation leading to the aberrant production of Bcr-Abl fusion protein often found in leukemias.

REFERENCES

1. Humphray, S.J., et al. 2004. DNA sequence and analysis of human chromosome 9. Nature 429: 369-374.
2. Neznanov, N., et al. 2005. Serologically defined colon cancer antigen 3 is necessary for the presentation of TNF receptor 1 on cell surface. DNA Cell Biol. 24: 777-785.

CHROMOSOMAL LOCATION

Genetic locus: SDCCAG3 (human) mapping to 9q34.3; Sdccag3 (mouse) mapping to 2 A3.

SOURCE

SDCCAG3 (E-2) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 100-121 near the N-terminus of SDCCAG3 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.

SDCCAG3 (E-2) is available conjugated to agarose (sc-398909 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-398909 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398909 PE), fluorescein (sc-398909 FITC), Alexa Fluor® 488 (sc-398909 AF488), Alexa Fluor® 546 (sc-398909 AF546), Alexa Fluor® 594 (sc-398909 AF594) or Alexa Fluor® 647 (sc-398909 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398909 AF680) or Alexa Fluor® 790 (sc-398909 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-398909 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

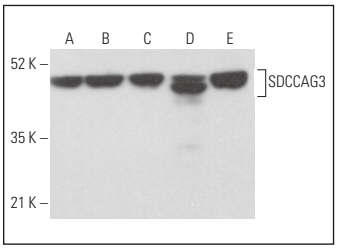
SDCCAG3 (E-2) is recommended for detection of SDCCAG3 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 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 SDCCAG3 siRNA (h): sc-92784, SDCCAG3 siRNA (m): sc-153284, SDCCAG3 shRNA Plasmid (h): sc-92784-SH, SDCCAG3 shRNA Plasmid (m): sc-153284-SH, SDCCAG3 shRNA (h) Lentiviral Particles: sc-92784-V and SDCCAG3 shRNA (m) Lentiviral Particles: sc-153284-V.

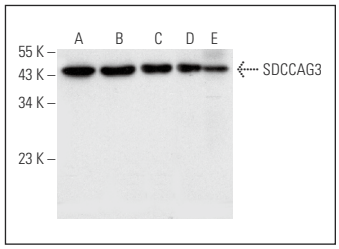
Molecular Weight of SDCCAG3 isoforms 1/2/3/4: 48/46/41/40 kDa.

Positive Controls: A549 cell lysate: sc-2413, RT-4 whole cell lysate: sc-364257 or Hep G2 cell lysate: sc-2227.

DATA



SDCCAG3 (E-2): sc-398909. Western blot analysis of SDCCAG3 expression in Hep G2 (**A**), MDA-MB-435S (**B**), EOC 20 (**C**), MTE1D (**D**) and C6 (**E**) whole cell lysates.



SDCCAG3 (E-2): sc-398909. Western blot analysis of SDCCAG3 expression in A549 (**A**), HEK293T (**B**) and RT-4 (**C**) whole cell lysates and mouse brain (**D**) and mouse pancreas (**E**) tissue extracts.

SELECT PRODUCT CITATIONS

1. Zhou, M., et al. 2016. VPS35 binds farnesylated N-Ras in the cytosol to regulate N-Ras trafficking. J. Cell Biol. 214: 445-458.
2. Chen, Z., et al. 2020. AMPK interactome reveals new function in non-homologous end joining DNA repair. Mol. Cell. Proteomics 19: 467-477.

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.