SANTA CRUZ BIOTECHNOLOGY, INC.

SEZ6 (G-16): sc-169292



BACKGROUND

SEZ6 (seizure related 6) is a 994 amino acid single-pass type I membrane protein that plays a role in cell-to-cell recognition and neuronal membrane signaling. Existing as four alternatively spliced isoforms, SEZ6 contains two CUB domains and five sushi (CCP/SCR) domains, and is involved in the development of excitatory synaptic connectivity. SEZ6 is encoded by a gene that maps to human chromosome 17, which comprises over 2.5% of the human genome and encodes over 1,200 genes. Two key tumor suppressor genes are associated with chromosome 17, namely, p53 and BRCA1. Malfunction or loss of p53 expression is associated with malignant cell growth and Li-Fraumeni syndrome. Like p53, BRCA1 is directly involved in DNA repair, though specifically it is recognized as a genetic determinant of early onset breast cancer and predisposition to cancers of the ovary, colon, prostate gland and fallopian tubes.

REFERENCES

- 1. Hall, J.M., et al. 1992. Closing in on a breast cancer gene on chromosome 17q. Am. J. Hum. Genet. 50: 1235-1242.
- 2. Evans, S.C., et al. 1997. The Li-Fraumeni syndrome: an inherited susceptibility to cancer. Mol. Med. Today 3: 390-395.
- Kersemaekers, A.M., et al. 1998. Loss of heterozygosity for defined regions on chromosomes 3, 11 and 17 in carcinomas of the uterine cervix. Br. J. Cancer 77: 192-200.
- Soussi, T., et al. 2000. p53 website and analysis of p53 gene mutations in human cancer: forging a link between epidemiology and carcinogenesis. Hum. Mutat. 15: 105-113.
- Piura, B., et al. 2001. Three primary malignancies related to BRCA mutation successively occurring in a BRCA1 185delAG mutation carrier. Eur. J. Obstet. Gynecol. Reprod. Biol. 97: 241-244.
- Wang, Y., et al. 2006. Tyrosine phosphorylated Par3 regulates epithelial tight junction assembly promoted by EGFR signaling. EMBO J. 25: 5058-5070.
- Yu, Z.L., et al. 2007. Febrile seizures are associated with mutation of seizure-related (SEZ) 6, a brain-specific gene. J. Neurosci. Res. 85: 166-172.

CHROMOSOMAL LOCATION

Genetic locus: SEZ6 (human) mapping to 17q11.2; Sez6 (mouse) mapping to 11 B5.

SOURCE

SEZ6 (G-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of SEZ6 of human origin.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

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

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-169292 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SEZ6 (G-16) is recommended for detection of SEZ6 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); non cross-reactive with SEZ6L or SEZ6L2.

SEZ6 (G-16) is also recommended for detection of SEZ6 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for SEZ6 siRNA (h): sc-94072, SEZ6 siRNA (m): sc-153390, SEZ6 shRNA Plasmid (h): sc-94072-SH, SEZ6 shRNA Plasmid (m): sc-153390-SH, SEZ6 shRNA (h) Lentiviral Particles: sc-94072-V and SEZ6 shRNA (m) Lentiviral Particles: sc-153390-V.

Molecular Weight of SEZ6 isoforms: 107/94/107/54 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) Immunofluo-rescence: 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.