SANTA CRUZ BIOTECHNOLOGY, INC.

EI24 (C-15): sc-11723

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

EI24 (etoposide-induced protein 2.4 homolog), also known as PIG8 (p53-induced gene 8 protein), is a 340 amino acid multi-pass membrane protein that belongs to the EI24 family and interacts with Bcl-2. Acting as a negative growth regulator via the p53-mediated apoptosis pathway, EI24 regulates the formation of degradative autolysosomes during autophagy. The gene encoding EI24 consists of approximately 15,464 bases and maps to human chromosome 11q24.2. Chromosome 11 houses over 1,400 genes and comprises nearly 4% of the human genome. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are associated with defects in genes that map to chromosome 11.

REFERENCES

1. Greenblatt, M.S., et al. 1994. Mutations in the p53 tumor suppressor gene: clues to cancer etiology and molecular pathogenesis. Cancer Res. 54: 4855- 4878.
2. Chen, X., et al. 1996. p53 levels, functional domains, and DNA damage determine the extent of the apoptotic response of tumor cells. Genes Dev. 10: 2438-2451.
3. Lehar, S.M., et al. 1996. Identification and cloning of EI24, a gene induced by p53 in etoposide-treated cells. Oncogene 12: 1181-1187.
4. Polyak, K., et al. 1997. A model for p53-induced apoptosis. Nature 389: 300-305.
5. Levine, A. J. 1997. p53, the cellular gatekeeper for growth and division. Cell 88: 323-331.
6. Gu, Z., et al. 2000. EI24, a p53 response gene involved in growth suppression and apoptosis. Mol. Cell. Biol. 20: 233-241.

CHROMOSOMAL LOCATION

Genetic locus: EI24 (human) mapping to 11q24.2; Ei24 (mouse) mapping to 9 A4.

SOURCE

EI24 (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of EI24 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-11723 P, (100 µg 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.

RESEARCH USE

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

APPLICATIONS

EI24 (C-15) is recommended for detection of EI24 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).

EI24 (C-15) is also recommended for detection of EI24 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for EI24 siRNA (h): sc-43748, EI24 siRNA (m): sc-144606, EI24 shRNA Plasmid (h): sc-43748-SH, EI24 shRNA Plasmid (m): sc-144606-SH, EI24 shRNA (h) Lentiviral Particles: sc-43748-V and EI24 shRNA (m) Lentiviral Particles: sc-144606-V.

Molecular Weight of EI24: 39 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210 or HeLa whole cell lysate: sc-2200.

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.

SELECT PRODUCT CITATIONS

1. Zeng, S.X., et al. 2002. SSRP1 functions as a co-activator of the transcriptional activator p63. EMBO J. 21: 5487-5497.

PROTOCOLS

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