

EI24 (H-20): sc-11724

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. Polyak, K., et al. 1997. A model for p53-induced apoptosis. *Nature* 389: 300-305.
2. Gu, Z., et al. 2000. The p53-inducible gene EI24/PIG8 localizes to human chromosome 11q23 and the proximal region of mouse chromosome 9. *Cytogenet. Cell Genet.* 89: 230-233.
3. Online Mendelian Inheritance in Man, OMIM[™]. 2000. Johns Hopkins University, Baltimore, MD. MIM Number: 605170. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
4. Gentile, M., et al. 2001. Candidate tumour suppressor genes at 11q23-q24 in breast cancer: evidence of alterations in PIG8, a gene involved in p53-induced apoptosis. *Oncogene* 20: 7753-7760.

CHROMOSOMAL LOCATION

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

APPLICATIONS

EI24 (H-20) 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), 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), immunohistochemistry (including paraffin-embedded sections) (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 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, HeLa whole cell lysate: sc-2200 or HeLa + etoposide 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.

SOURCE

EI24 (H-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of EI24 of mouse origin.

PRODUCT

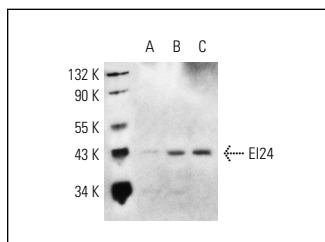
Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-11724 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

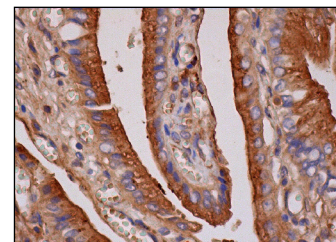
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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. 4) Immunohistochemistry: use ImmunoCruz[™]: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



EI24 (H-20): sc-11724. Western blot analysis of EI24 expression in HeLa (A), HeLa + etoposide (B) and NIH/3T3 (C) whole cell lysates.



EI24 Antibody (H-20): sc-11724. Immunoperoxidase staining of formalin fixed, paraffin-embedded human gall bladder tissue showing cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Mazumder Indra, D., et al. 2011. Inactivation of CHEK1 and EI24 is associated with the development of invasive cervical carcinoma: clinical and prognostic implications. *Int. J. Cancer* 129: 1859-1871.
2. Sinha, S., et al. 2011. Frequent alterations of LOH11CR2A, PIG8 and CHEK1 genes at chromosomal 11q24.1-24.2 region in breast carcinoma: clinical and prognostic implications. *Mol. Oncol.* 5: 454-464.

RESEARCH USE

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