

pescadillo (H-300): sc-134604

BACKGROUND

The deduced 588 amino acid pescadillo protein (also designated PES1) is the human homolog of zebrafish pescadillo and shows 74% sequence identity to the zebrafish sequence. During the first three days of zebrafish development, pescadillo is highly expressed, but no expression is observed in any adult tissue except the ovary. The mouse pescadillo sequence contains a BRCT (breast cancer C-terminal) domain, originally identified in BRCA1, a p53-binding protein. In mouse tissue, pescadillo is ubiquitously expressed with highest levels of expression in adult and fetal liver, followed by adult kidney and testis; the lowest expression is found in skeletal muscle. Pescadillo upregulation occurs in human breast carcinoma cells and in primary glioblastoma cells. Proliferation only occurs in HeLa cells that express pescadillo.

REFERENCES

- Allende, M.L., et al. 1997. Insertional mutagenesis in zebrafish identifies two novel genes, pescadillo and dead eye, essential for embryonic development. *Genes Dev.* 10: 3141-3155.
- Dunham, I., et al. 1999. The DNA sequence of human chromosome 22. *Nature* 402: 489-495.
- Haque, J., et al. 2001. The murine Pes1 gene encodes a nuclear protein containing a BRCT domain. *Genomics* 70: 201-210.
- Kinoshita, Y., et al. 2001. Pescadillo, a novel cell cycle regulatory protein abnormally expressed in malignant cells. *J. Biol. Chem.* 276: 6656-6665.
- Lerch-Gaggl, A., et al. 2002. Pescadillo is essential for nucleolar assembly, ribosome biogenesis, and mammalian cell proliferation. *J. Biol. Chem.* 277: 45347-45355.
- Maiorana, A., et al. 2004. Role of pescadillo in the transformation and immortalization of mammalian cells. *Oncogene* 23: 7116-7124.
- Killian, A., et al. 2004. Inactivation of the RRB1-Pescadillo pathway involved in ribosome biogenesis induces chromosomal instability. *Oncogene* 23: 8597-8602.
- Prisco, M., et al. 2004. Role of pescadillo and upstream binding factor in the proliferation and differentiation of murine myeloid cells. *Mol. Cell. Biol.* 24: 5421-5433.
- Zhang, H., et al. 2005. Human pescadillo induces large-scale chromatin unfolding. *Sci. China, C, Life Sci.* 48: 270-276.

CHROMOSOMAL LOCATION

Genetic locus: PES1 (human) mapping to 22q12.2; Pes1 (mouse) mapping to 11 A1.

SOURCE

pescadillo (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 mapping at the N-terminus of pescadillo of human origin.

STORAGE

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

PRODUCT

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

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-134604 X, 200 µg/0.1 ml.

APPLICATIONS

pescadillo (H-300) is recommended for detection of pescadillo isoforms 1 and 2 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

pescadillo (H-300) is also recommended for detection of pescadillo in additional species, including equine, canine and porcine.

Suitable for use as control antibody for pescadillo siRNA (h): sc-61328, pescadillo siRNA (m): sc-61329, pescadillo shRNA Plasmid (h): sc-61328-SH, pescadillo shRNA Plasmid (m): sc-61329-SH, pescadillo shRNA (h) Lentiviral Particles: sc-61328-V and pescadillo shRNA (m) Lentiviral Particles: sc-61329-V.

pescadillo (H-300) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of pescadillo: 68 kDa.

Positive Controls: SW480 cell lysate: sc-2219, HeLa whole cell lysate: sc-2200 or T24 cell lysate: sc-2292.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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.