

pescadillo (m3): 293T Lysate: sc-125811

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

1. 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.
2. Dunham, I., et al. 1999. The DNA sequence of human chromosome 22. *Nature* 402: 489-495.
3. Haque, J., et al. 2001. The murine Pes1 gene encodes a nuclear protein containing a BRCT domain. *Genomics* 70: 201-210.
4. Kinoshita, Y., et al. 2001. Pescadillo, a novel cell cycle regulatory protein abnormally expressed in malignant cells. *J. Biol. Chem.* 276: 6656-6665.
5. Lerch-Gaggl, A., et al. 2002. Pescadillo is essential for nucleolar assembly, ribosome biogenesis, and mammalian cell proliferation. *J. Biol. Chem.* 277: 45347-45355.
6. Killian, A., et al. 2004. Inactivation of the RRB1-Pescadillo pathway involved in ribosome biogenesis induces chromosomal instability. *Oncogene* 23: 8597-8602.
7. Maiorana, A., et al. 2004. Role of pescadillo in the transformation and immortalization of mammalian cells. *Oncogene* 23: 7116-7124.
8. 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.
9. 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 (mouse) mapping to 11 A1.

PRODUCT

pescadillo (m3): 293T Lysate represents a lysate of mouse pescadillo transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

pescadillo (m3): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive pescadillo antibodies. Recommended use: 10-20 µl per lane.

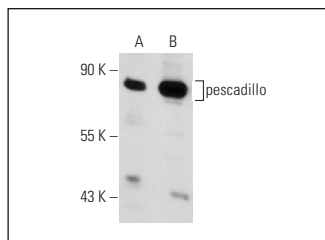
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

pescadillo (H-10): sc-166300 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse pescadillo expression in pescadillo transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



pescadillo (H-10): sc-166300. Western blot analysis of pescadillo expression in non-transfected: sc-117752 (A) and mouse pescadillo transfected: sc-125811 (B) 293T whole cell lysates.

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.