

Pumilio 2 (m): 293T Lysate: sc-122843

BACKGROUND

Pumilio 2 is a sequence-specific RNA-binding protein that regulates translation and mRNA stability by binding mRNA targets. It supports proliferation and self-renewal of stem cells by regulating the translation of key transcripts. The Pumilio gene encodes proteins that are required for development of germ stem cells in one or both sexes. The Pumilio protein interacts with the human Nanos1 protein and this interaction may play a conserved role in germ cell development. Pumilio 2 is highly expressed in testis and ovary and at lower levels in brain, heart, kidney, liver, muscle, placenta, intestine and stomach. It is also expressed in stem cells, germ cells and in most fetal tissues.

REFERENCES

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5. Spik, A., et al. 2006. Candidate mRNAs interacting with fertility protein PUMILIO2 in the human germ line. *Reprod. Biol.* 1: 37-42.
6. Spik, A., et al. 2006. Human fertility protein PUMILIO2 interacts *in vitro* with testis mRNA encoding Cdc42 effector 3 (CEP3). *Reprod. Biol.* 6: 103-113.
7. Kusz, K., et al. 2007. Polymorphisms of the human PUMILIO2 gene and male sterility. *Mol. Reprod. Dev.* 74: 795-799.
8. Xu, E.Y., et al. 2007. A gene trap mutation of a murine homolog of the *Drosophila* stem cell factor Pumilio results in smaller testes but does not affect litter size or fertility. *Mol. Reprod. Dev.* 74: 912-921.
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CHROMOSOMAL LOCATION

Genetic locus: Pum2 (mouse) mapping to 12 A1.1.

PRODUCT

Pumilio 2 (m): 293T Lysate represents a lysate of mouse Pumilio 2 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

Pumilio 2 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Pumilio 2 antibodies. Recommended use: 10-20 µl per lane.

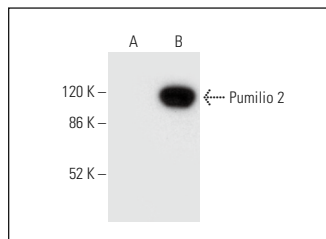
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Pumilio 2 (A-10): sc-398632 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse Pumilio 2 expression in Pumilio 2 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



Pumilio 2 (A-10): sc-398632. Western blot analysis of Pumilio 2 expression in non-transfected: sc-117752 (A) and mouse Pumilio 2 transfected: sc-122843 (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.