# SANTA CRUZ BIOTECHNOLOGY, INC.

# PABPC5 (N-12): sc-168886



## BACKGROUND

PABPC5 (poly(A) binding protein, cytoplasmic 5), also known as PABP5, is a 382 amino acid cytoplasmic protein that binds the poly(A) tail at the 3' end of most eukaryotic mRNA. PABPC5 may also bind other cytoplasmic RNA sequences *in vivo* and is thought to regulate various steps during mRNA metabolism. Expressed in multiple adult tissues and fetal brain, PABPC5 contains four RRM (RNA recognition motif) domains. PABPC5 is encoded by a gene that maps to human chromosome Xq21.31, a region in close proximity to several translocation breakpoints linked to premature ovarian failure. Chromosome X consists of about 153 million base pairs and nearly 1,000 genes. Color blindness, hemophilia and Duchenne muscular dystrophy are well known X chromosome-linked conditions which affect males more frequently, as males carry a single X chromosome.

## REFERENCES

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- Bernardino-Sgherri, J., et al. 2002. Overall DNA methylation and chromatin structure of normal and abnormal X chromosomes. Cytogenet. Genome Res. 99: 85-91.
- 3. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 300407. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- 4. Deeb, S.S. 2005. The molecular basis of variation in human color vision. Clin. Genet. 67: 369-377.
- Sharpe, L.T., et al. 2006. Advantages and disadvantages of human dichromacy. J. Vis. 6: 213-223.
- Helderman-van den Enden, A.T., et al. 2009. Recurrence risk due to germ line mosaicism: Duchenne and Becker muscular dystrophy. Clin. Genet. 75: 465-472.
- 7. Kasper, C.K., et al. 2009. Mosaicism and haemophilia. Haemophilia. E-published.

## CHROMOSOMAL LOCATION

Genetic locus: PABPC5 (human) mapping to Xq21.31; Pabpc5 (mouse) mapping to X E1.

#### SOURCE

PABPC5 (N-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of PABPC5 of human origin.

### **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### PROTOCOLS

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

## PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-168886 P, (100  $\mu g$  peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

PABPC5 (N-12) is recommended for detection of PABPC5 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); non cross-reactive with other PABPC family members.

PABPC5 (N-12) is also recommended for detection of PABPC5 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for PABPC5 siRNA (h): sc-91049, PABPC5 siRNA (m): sc-151981, PABPC5 shRNA Plasmid (h): sc-91049-SH, PABPC5 shRNA Plasmid (m): sc-151981-SH, PABPC5 shRNA (h) Lentiviral Particles: sc-91049-V and PABPC5 shRNA (m) Lentiviral Particles: sc-151981-V.

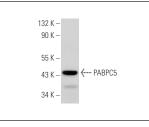
Molecular Weight of PABPC5: 43 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, SH-SY5Y cell lysate: sc-3812 or Jurkat whole cell lysate: sc-2204.

#### **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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.





PABPC5 (N-12): sc-168886. Western blot analysis of PABPC5 expression in SH-SY5Y whole cell lysate.

#### **RESEARCH USE**

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