# SANTA CRUZ BIOTECHNOLOGY, INC.

# ArpM1 (E-15): sc-102324



#### BACKGROUND

Actin-related proteins are classified into Arp subclasses according to their amino acid sequence similarity to Actin. Both Arps and Actin proteins have an ATPase domain, which catalyzes the decomposition of adenosine triphosphate (ATP) into adenosine diphosphate (ADP) and a free phosphate ion to release energy. ArpM1 (actin-related protein M1) is a 372 amino acid ubiquitously expressed protein that localizes to both the cytoplasm and the cytoskeleton and belongs to the Arp family of Actin-like proteins. The gene encoding ArpM1 maps to human chromosome 3, which houses over 1,100 genes, including a chemokine receptor (CKR) gene cluster and a variety of human cancer-related gene loci.

# REFERENCES

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- Harata, M., Nishimori, K. and Hatta, S. 2001. Identification of two cDNAs for human actin-related proteins (Arps) that have remarkable similarity to conventional actin. Biochim. Biophys. Acta 1522: 130-133.
- 3. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 608534. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Blessing, C.A., Ugrinova, G.T. and Goodson, H.V. 2004. Actin and ARPs: action in the nucleus. Trends Cell Biol. 14: 435-442.
- Chen, M. and Shen, X. 2007. Nuclear Actin and Actin-related proteins in chromatin dynamics. Curr. Opin. Cell Biol. 19: 326-330.
- Hara, Y., Yamagata, K., Oguchi, K. and Baba, T. 2008. Nuclear localization of profilin III-ArpM1 complex in mouse spermiogenesis. FEBS Lett. 582: 2998-3004.

#### CHROMOSOMAL LOCATION

Genetic locus: ARPM1 (human) mapping to 3q26.2.

#### SOURCE

ArpM1 (E-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ArpM1 of human origin.

# PRODUCT

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

Blocking peptide available for competition studies, sc-102324 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **STORAGE**

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

#### **RESEARCH USE**

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

# APPLICATIONS

ArpM1 (E-15) is recommended for detection of ArpM1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 Arp family members.

Suitable for use as control antibody for ArpM1 siRNA (h): sc-78402, ArpM1 shRNA Plasmid (h): sc-78402-SH and ArpM1 shRNA (h) Lentiviral Particles: sc-78402-V.

Molecular Weight of ArpM1: 41 kDa.

#### **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) Immunofluo-rescence: 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.

## PROTOCOLS

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