SANTA CRUZ BIOTECHNOLOGY, INC.

adseverin (N-17): sc-79835



BACKGROUND

Adseverin (ADSV), also known as Scinderin (SCIN), is a 715 amino acid protein belonging to the Villin/Gelsolin family. Adseverin is a Ca²⁺-dependent actin filament-severing protein localized to the cytoskeleton. Adseverin is believed to have a regulatory role in exocytosis by altering the organization of the microfilament network underneath the plasma membrane. *In vitro*, adseverin has barbed end capping and nucleating activities in the presence of Ca²⁺. Adseverin contains six Gelsolin-like repeats and is expressed as two isoforms produced by alternative splicing.

REFERENCES

- Rodríguez Del Castillo, A., et al. 1992. Ca²⁺ and pH determine the interaction of chromaffin cell scinderin with phosphatidylserine and phosphatidylinositol 4,5,-biphosphate and its cellular distribution during nicotinic-receptor stimulation and protein kinase C activation. J. Cell Biol. 119: 797-810.
- Rodríguez Del Castillo, A., et al. 1992. Human platelets contain scinderin, a Ca²⁺-dependent actin filament-severing protein. Thromb. Haemost. 67: 248-251.
- Lueck, A., et al. 1998. The actin-binding proteins adseverin and Gelsolin are both highly expressed but differentially localized in kidney and intestine. J. Cell Sci. 111: 3633-3643.
- Zunino, R., et al. 2001. Expression of scinderin in megakaryoblastic leukemia cells induces differentiation, maturation, and apoptosis with release of plateletlike particles and inhibits proliferation and tumorigenesis. Blood 98: 2210-2219.
- Lejen, T., et al. 2002. The role of different scinderin domains in the control of F-Actin cytoskeleton during exocytosis. Ann. N.Y. Acad. Sci. 971: 248-250.
- Ehre, C., et al. 2005. Barrier role of actin filaments in regulated mucin secretion from airway goblet cells. Am. J. Physiol., Cell Physiol. 288: C46-C56.
- Abouzahr, S., et al. 2006. Identification of target actin content and polymerization status as a mechanism of tumor resistance after cytolytic T lymphocyte pressure. Proc. Natl. Acad. Sci. USA 103: 1428-1433.
- 8. Nurminsky, D., et al. 2007. Regulation of chondrocyte differentiation by actin-severing protein adseverin. Dev. Biol. 302: 427-437.

CHROMOSOMAL LOCATION

Genetic locus: SCIN (human) mapping to 7p21.3; Scin (mouse) mapping to 12 B1.

SOURCE

adseverin (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of adseverin 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 lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-79835 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

adseverin (N-17) is recommended for detection of adseverin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

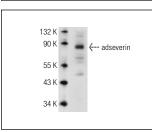
adseverin (N-17) is also recommended for detection of adseverin in additional species, including equine, bovine and porcine.

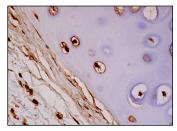
Suitable for use as control antibody for adseverin siRNA (h): sc-72455, adseverin siRNA (m): sc-72456, adseverin shRNA Plasmid (h): sc-72455-SH, adseverin shRNA Plasmid (m): sc-72456-SH, adseverin shRNA (h) Lentiviral Particles: sc-72455-V and adseverin shRNA (m) Lentiviral Particles: sc-72456-V.

Molecular Weight of adseverin: 79 kDa.

Positive Controls: mouse brain extract: sc-2253.

DATA





adseverin (N-17): sc-79835. Western blot analysis of adseverin expression in mouse brain tissue extract.

adseverin (N-17): sc-79835. Immunoperoxidase staining of formalin fixed, paraffin-embedded human soft tissue showing membrane and nuclear staining of chondrocytes and cytoplasmic and nuclear staining of fibroblasts.

RESEARCH USE

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

