

Pinin (T-15): sc-74833

BACKGROUND

Pinin is a desmosomal associated protein involved with the maintenance of cell to cell adhesion of the epithelium. Pinin is a widespread protein and has been shown to play an important role in cell adhesion through its interaction with nuclear complexes. Pinin is also involved in pre-mRNA splicing through its interactions with a C-terminal RS domain of Cyclophilin G, a Moca type nuclear cyclophilin. Pinin becomes nuclear during the early stages of embryonic development and remains so throughout the entire period. Defects or lack of Pinin can be lethal at perinatal stages and causes defects in the cardiac outflow tract, axial skeleton, palate and dorsal dermis.

REFERENCES

- Ouyang, P. and Sugrue, S.P. 1996. Characterization of Pinin, a novel protein associated with the desmosome-intermediate filament complex. *J. Cell Biol.* 135: 1027-1042.
- Brandner, J.M., Reidenbach, S. and Franke, W.W. 1997. Evidence that "Pinin", reportedly a differentiation-specific desmosomal protein, is actually a widespread nuclear protein. *Differentiation* 62: 119-127.
- Ouyang, P. 1999. Antibodies differentiate desmosome-form and nucleus-form Pinin: evidence that Pinin is a moonlighting protein with dual location at the desmosome and within the nucleus. *Biochem. Biophys. Res. Commun.* 263: 192-200.
- Shi, Y., Tabesh, M. and Sugrue, S.P. 2000. Role of cell adhesion-associated protein, Pinin (DRS/memA), in corneal epithelial migration. *Invest. Ophthalmol. Vis. Sci.* 41: 1337-1345.
- Shi, Y., Ouyang, P. and Sugrue, S.P. 2000. Characterization of the gene encoding Pinin/DRS/memA and evidence for its potential tumor suppressor function. *Oncogene* 19: 289-297.
- Joo, J.H., Alpatov, R., Munguba, G.C., Jackson, M.R., Hunt, M.E. and Sugrue, S.P. 2005. Reduction of Pnn by RNAi induces loss of cell-cell adhesion between human corneal epithelial cells. *Mol. Vis.* 11: 133-142.

CHROMOSOMAL LOCATION

Genetic locus: PNN (human) mapping to 14q21.1; Pnn (mouse) mapping to 12 C1.

SOURCE

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

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-74833 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

Pinin (T-15) is recommended for detection of Pinin 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).

Suitable for use as control antibody for Pinin siRNA (h): sc-76142, Pinin siRNA (m): sc-76143, Pinin shRNA Plasmid (h): sc-76142-SH, Pinin shRNA Plasmid (m): sc-76143-SH, Pinin shRNA (h) Lentiviral Particles: sc-76142-V and Pinin shRNA (m) Lentiviral Particles: sc-76143-V.

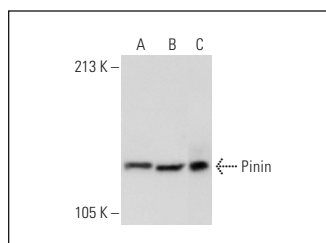
Molecular Weight of Pinin: 140 kDa.

Positive Controls: HEK293 whole cell lysate: sc-45136, HeLa whole cell lysate: sc-2200 or U-698-M whole cell lysate: sc-364799.

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) 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™ Mounting Medium: sc-24941.

DATA



Pinin (T-15): sc-74833. Western blot analysis of Pinin expression in HEK293 (A), HeLa (B) and U-698-M (C) whole cell lysates.

RESEARCH USE

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

MONOS
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Try **Pinin (4FQ): sc-101127**, our highly recommended monoclonal alternative to Pinin (T-15).