vezatin (h): 293T Lysate: sc-117118



The Power to Question

BACKGROUND

Vezatin is a single transmembrane domain containing mammalian adhesion protein that is ubiquitously expressed at adherens cell-cell junctions. Adherens junctions (zonula adherens) are cell-cell junctions that host microfilaments and/or intermediate filaments, which can coordinate with focal adhesion proteins and mediate tissue organization and morphogenesis. Vezatin interacts with Actin filamentous networks and anchors myosin VIIA to cadherin complexes, thereby creating a network between adherens junctions and the Actin cytoskeleton. This may enhance cell-cell adhesion characteristics and influence cadherin-based signals. Vezatin is concentrated in the fibrillar links interconnecting the bases of adjacent stereocilia in the inner ear sensory hair cells and may mediate proper positioning of hair cell stereocilia. Loss of a functional vezatin-myosin VIIA complex at both the adherent junctions and the base of the stereocilia is likely to account for the splaying out of the stereocilia observed in Myo7a- $^{-/}$ - animals. Vezatin recruitment to adherens junctions implicates the C-terminal region of α -catenin.

REFERENCES

- Kemler, R. 1993. From cadherins to catenins: cytoplasmic protein interactions and regulation of cell adhesion. Trends Genet. 9: 317-321.
- Kussel-Andermann, P., El-Amraoui, A., Safieddine, S., Nouaille, S., Perfettini, I., Lecuit, M., Cossart, P., Wolfrum, U. and Petit, C. 2000. Vezatin, a novel transmembrane protein, bridges myosin VIIA to the cadherin-catenins complex. EMBO J. 19: 6020-6029.
- 3. Ko, K.S., Arora, P.D. and McCulloch, C.A. 2001. Cadherins mediate intercellular mechanical signaling in fibroblasts by activation of stretch-sensitive calcium permeable channels. J. Biol. Chem. 276: 35967-35977.
- Li, G., Satyamoorthy, K. and Herlyn, M. 2001. N-cadherin-mediated intercellular interactions promote survival and migration of melanoma cells. Cancer Res. 61: 3819-3825.
- Geisbrecht, E.R. and Montell D.J. 2002. Myosin VI is required for E-cadherinmediated border cell migration. Nat. Cell Biol. 4: 616-620.
- Sousa, S., Cabanes, D., El-Amraoui, A., Petit, C., Lecuit, M. and Cossart, P. 2004. Unconventional myosin VIIA and vezatin, two proteins crucial for Listeria entry into epithelial cells. J. Cell Sci. 117: 2121-2130.
- 7. LocusLink Report (LocusID: 55591). http://www.ncbi.nlm.nih.gov/LocusLink/

CHROMOSOMAL LOCATION

Genetic locus: VEZT (human) mapping to 12q22.

PRODUCT

vezatin (h): 293T Lysate represents a lysate of human vezatin 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

vezatin (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive vezatin antibodies. Recommended use: 10-20 µl per lane.

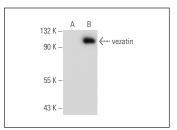
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

vezatin (A-3): sc-271369 is recommended as a positive control antibody for Western Blot analysis of enhanced human vezatin expression in vezatin 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-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



vezatin (A-3): sc-271369. Western blot analysis of vezatin expression in non-transfected: sc-117752 (A) and human vezatin transfected: sc-117118 (B) 293T whole cell Ivsates.

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.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com