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ESPN Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6876a

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	B1AK53
Other Accession	Q63618
Reactivity	Human
Predicted	Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB20951
Calculated MW	91733
Antigen Region	17-45

Additional Information

Gene ID	83715
Other Names	Espin, Autosomal recessive deafness type 36 protein, Ectoplasmic specialization protein, ESPN, DFNB36
Target/Specificity	This ESPN antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 17-45 amino acids from the N-terminal region of human ESPN.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	ESPN Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ESPN
Synonyms	DFNB36

Function	Multifunctional actin-bundling protein. Plays a major role in regulating the organization, dimension, dynamics and signaling capacities of the actin filament-rich microvilli in the mechanosensory and chemosensory cells (PubMed:29572253). Required for the assembly and stabilization of the stereociliary parallel actin bundles. Plays a crucial role in the formation and maintenance of inner ear hair cell stereocilia (By similarity). Involved in the elongation of actin in stereocilia (PubMed:29572253). In extrastriolar hair cells, required for targeting MYO3B to stereocilia tips, and for regulation of stereocilia diameter and staircase formation.
Cellular Location	Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:Q9ET47}. Cell projection, stereocilium. Cell projection, microvillus

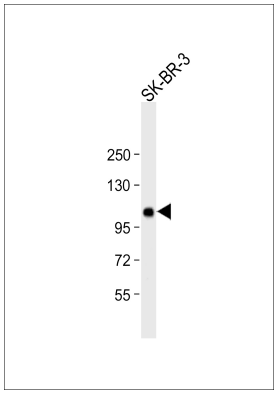
Background

ESPN is a multifunctional actin-bundling protein. It plays a major role in regulating the organization, dimensions, dynamics, and signaling capacities of the actin filament-rich, microvillus-type specializations that mediate sensory transduction in various mechanosensory and chemosensory cells.

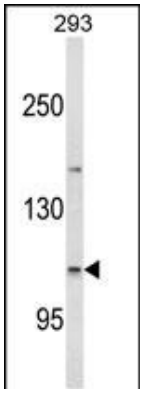
References

Boulouiz,R., et.al., Am. J. Med. Genet. A 146A (23), 3086-3089 (2008)

Images

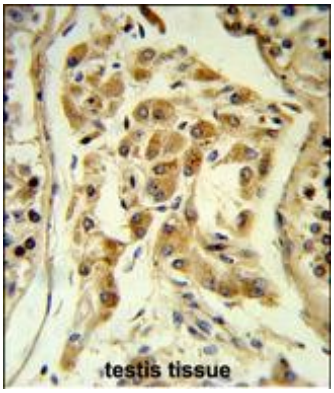


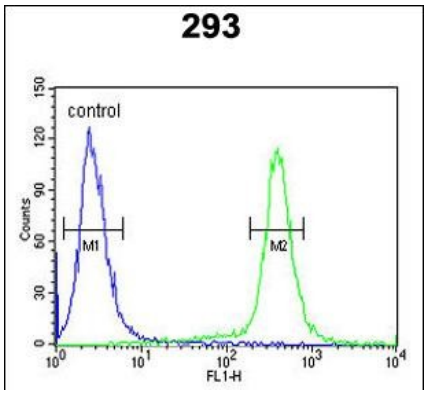
Anti-ESPN Antibody (N-term) at 1:1000 dilution + SK-BR-3 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L),Peroxidase conjugated at 1/10000 dilution. Predicted band size : 92 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot analysis of ESPN Antibody (N-term) (Cat. #AP6876a) in 293 cell line lysates (35ug/lane). ESPN (arrow) was detected using the purified Pab.

Formalin-fixed and paraffin-embedded human testis tissue reacted with ESPN Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.





ESPN Antibody (N-term) (Cat. #AP6876a) flow cytometric analysis of 293 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.