

**ESPN Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP6876a**

**Specification**

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**ESPN Antibody (N-term) - Product Information**

Application	FC, IHC-P, WB,E
Primary Accession	<a href="#">B1AK53</a>
Other Accession	<a href="#">Q63618</a>
Reactivity	Human
Predicted	Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	91733
Antigen Region	17-45

**ESPN Antibody (N-term) - 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**

FC~~1:10~50

IHC-P~~1:50~100

WB~~1:1000

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.

**ESPN Antibody (N-term) - 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 extrastricular hair cells, required for targeting MYO3B to stereocilia tips, and for regulation of stereocilia diameter and staircase formation.

**Cellular Location**

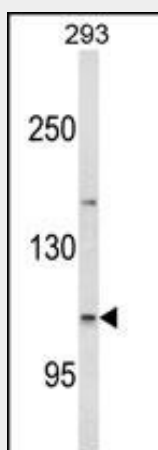
Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:Q9ET47}. Cell projection, stereocilium. Cell projection, microvillus

**ESPN Antibody (N-term) - Protocols**

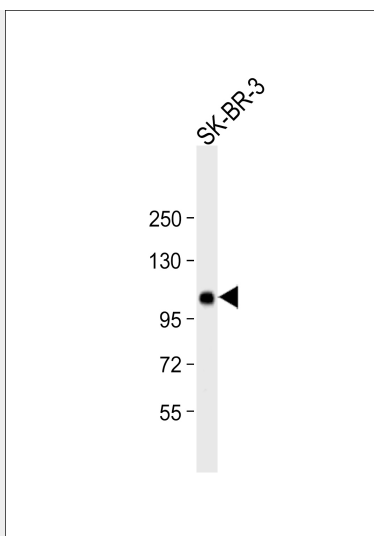
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

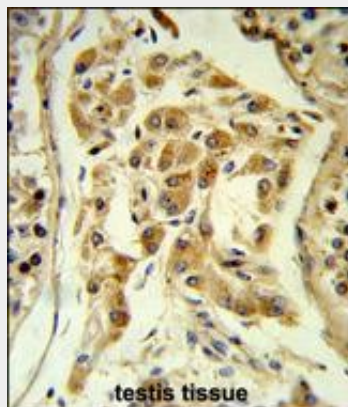
**ESPN Antibody (N-term) - Images**



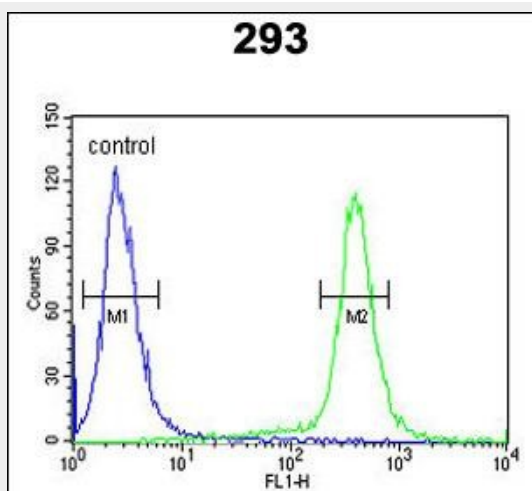
Western blot analysis of ESPN Antibody (N-term) (Cat. #AP6876a) in 293 cell line lysates (35ug/lane). ESPN (arrow) was detected using the purified Pab.



Anti-ESPN Antibody (N-term) at 1:1000 dilution + SK-BR-3 whole cell lysate Lysates/proteins at 20  $\mu$ g 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.



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.

#### **ESPN Antibody (N-term) - 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.

#### **ESPN Antibody (N-term) - References**

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