

Datasheet for ABIN968627
anti-Espin antibody (AA 458-580)

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Overview

Quantity:	50 µg
Target:	Espin (ESPN)
Binding Specificity:	AA 458-580
Reactivity:	Human, Mouse, Rat, Chicken
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This Espin antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF)

Product Details

Immunogen:	Rat espin aa. 458-580
Clone:	31-Espin
Isotype:	IgG2a
Cross-Reactivity:	Human, Mouse (Murine), Chicken
Characteristics:	<ol style="list-style-type: none">1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.2. Please refer to us for technical protocols.3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity

Product Details

chromatography.

Target Details

Target:	Espin (ESPN)
Alternative Name:	Espin (ESPN Products)
Background:	Actin-binding proteins regulate the polymerization and depolymerization of actin, connect actin-based structures to membranes and to other cytoskeletal elements, power the movement of actin filaments, and cross-link actin filaments into bundles. Espins are actin binding and bundling proteins. The two isoforms of espin are the 30 kDa small espin found in brush border cells and the 110 kDa espin found in testis. Espin contains eight ankyrin repeats in the N-terminal region, two proline-rich peptides, an ATP/GTP binding P-loop domain, and a C-terminal actin bundling domain. Small espin is composed of the C-terminal actin bundling domain and a unique region at the N-terminus. Espin binds to actin with a higher affinity than small espin and is more efficient at actin bundling. During spermiogenesis, espin accumulates, along with forming parallel actin bundles, at the ectoplasmic specialization. These actin bundles anchor and position the spermatid within the seminiferous epithelium. Other actin binding proteins, such as alpha-actinin, vinculin, and fimbrin, have also been implicated in the formation of ectoplasmic specialization, however espin appears to function specifically in the testes.
Molecular Weight:	110 kDa
Pathways:	Sensory Perception of Sound

Application Details

Comment:	Related Products: ABIN967389
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	250 µg/mL
Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which

Handling

	should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store undiluted at -20°C.

Publications

Product cited in:	<p>Chen, Li, Wang, Wang, Zheng, Bartles: "Espin contains an additional actin-binding site in its N terminus and is a major actin-bundling protein of the Sertoli cell-spermatid ectoplasmic specialization junctional plaque." in: Molecular biology of the cell, Vol. 10, Issue 12, pp. 4327-39 , (2000) (PubMed).</p> <p>Bartles, Zheng, Li, Wierda, Chen: "Small espin: a third actin-bundling protein and potential forked protein ortholog in brush border microvilli." in: The Journal of cell biology, Vol. 143, Issue 1, pp. 107-19, (1998) (PubMed).</p> <p>Bartles, Wierda, Zheng: "Identification and characterization of espin, an actin-binding protein localized to the F-actin-rich junctional plaques of Sertoli cell ectoplasmic specializations." in: Journal of cell science, Vol. 109 (Pt 6), pp. 1229-39, (1997) (PubMed).</p>
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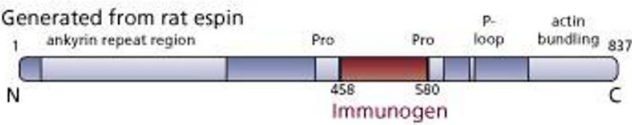
Images



Western Blotting

Image 1. Western blot analysis of Espin on rat testis lysate. Lane 1, 1:5000, lane 2: 1:10000, lane 3, 1:20000 dillution of anti-Espin.

Image 2.



Western Blotting

Image 3.