

**Anti-alpha Actinin 4 ACTN4 Monoclonal Antibody**  
Catalog # ABO14476

**Specification**

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**Anti-alpha Actinin 4 ACTN4 Monoclonal Antibody - Product Information**

Application	WB, IHC, IF, ICC, IP, FC
Primary Accession	<a href="#">O43707</a>
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

**Description**

Anti-alpha Actinin 4 ACTN4 Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

**Anti-alpha Actinin 4 ACTN4 Monoclonal Antibody - Additional Information**

**Gene ID** 81

**Other Names**

Alpha-actinin-4, Non-muscle alpha-actinin 4, ACTN4 (<a href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=166" target="\_blank">HGNC:166</a>)

**Application Details**

WB 1:500-1:2000<br>IHC 1:50-1:200<br>ICC/IF 1:50-1:200<br>IP 1:50<br>FC 1:50

**Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

**Immunogen**

A synthesized peptide derived from human alpha Actinin 4

**Purification**

Affinity-chromatography

**Storage**

**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.**

**Anti-alpha Actinin 4 ACTN4 Monoclonal Antibody - Protein Information**

**Name** ACTN4 ([HGNC:166](#))

**Function**

F-actin cross-linking protein which is thought to anchor actin to a variety of intracellular structures. This is a bundling protein (Probable). Probably involved in vesicular trafficking via its association with the CART complex. The CART complex is necessary for efficient transferrin receptor recycling but not for EGFR degradation (PubMed:<a href="http://www.uniprot.org/citations/15772161" target="\_blank">15772161</a>). Involved in tight junction assembly in epithelial cells probably through interaction with MICALL2. Links MICALL2 to the actin cytoskeleton and recruits it to the tight junctions (By similarity). May also function as a transcriptional coactivator, stimulating transcription mediated by the nuclear hormone receptors PPARG and RARA (PubMed:<a href="http://www.uniprot.org/citations/22351778" target="\_blank">22351778</a>). Association with IGSF8 regulates the immune synapse formation and is required for efficient T-cell activation (PubMed:<a href="http://www.uniprot.org/citations/22689882" target="\_blank">22689882</a>).

#### Cellular Location

Nucleus. Cytoplasm. Cell junction {ECO:0000250|UniProtKB:P57780}. Cytoplasm, cytoskeleton, stress fiber. Cytoplasm, perinuclear region {ECO:0000250|UniProtKB:P57780}. Note=Localized in cytoplasmic mRNP granules containing untranslated mRNAs. Expressed in the perinuclear rim and manchette structure in early elongating spermatids during spermiogenesis (By similarity). Nuclear translocation can be induced by the PI3 kinase inhibitor wortmannin or by cytochalasin D. Exclusively localized in the nucleus in a limited number of cell lines (breast cancer cell line MCF-7, oral floor cancer IMC-2, and bladder cancer KU- 7). {ECO:0000250|UniProtKB:P57780, ECO:0000269|PubMed:17289661, ECO:0000269|PubMed:9508771}

#### Tissue Location

Widely expressed..

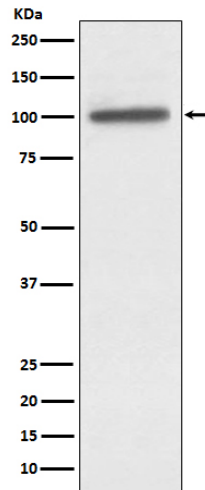
### Anti-alpha Actinin 4 ACTN4 Monoclonal Antibody - Protocols

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](#)

### Anti-alpha Actinin 4 ACTN4 Monoclonal Antibody - Images





Western blot analysis of alpha Actinin 4 expression in A431 cell lysate.

#### **Anti-alpha Actinin 4 ACTN4 Monoclonal Antibody - Background**

F-actin cross-linking protein which is thought to anchor actin to a variety of intracellular structures. This is a bundling protein. Probably involved in vesicular trafficking via its association with the CART complex. The CART complex is necessary for efficient transferrin receptor recycling but not for EGFR degradation.