

**ACTB / Beta Actin Antibody (N-Terminus)**  
**Rabbit Polyclonal Antibody**  
**Catalog # ALS12309**

**Specification**

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**ACTB / Beta Actin Antibody (N-Terminus) - Product Information**

Application	WB, IHC-P, IF, ICC
Primary Accession	<a href="#">P60709</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	42kDa KDa
Dilution	WB~~1:1000 IHC-P~~N/A IF~~1:50~200 ICC~~N/A

**ACTB / Beta Actin Antibody (N-Terminus) - Additional Information**

**Gene ID** 60

**Other Names**

Actin, cytoplasmic 1, Beta-actin, Actin, cytoplasmic 1, N-terminally processed, ACTB

**Target/Specificity**

16 amino acid peptide from near the amino-terminus of human b-actin

**Reconstitution & Storage**

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

**Precautions**

ACTB / Beta Actin Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

**ACTB / Beta Actin Antibody (N-Terminus) - Protein Information**

**Name** ACTB

**Function**

Actin is a highly conserved protein that polymerizes to produce filaments that form cross-linked networks in the cytoplasm of cells (PubMed: [25255767](http://www.uniprot.org/citations/25255767), PubMed: [29581253](http://www.uniprot.org/citations/29581253)). Actin exists in both monomeric (G-actin) and polymeric (F-actin) forms, both forms playing key functions, such as cell motility and contraction (PubMed: [29581253](http://www.uniprot.org/citations/29581253)). In addition to their role in the cytoplasmic cytoskeleton, G- and F- actin also localize in the nucleus, and regulate gene transcription and motility and repair of damaged DNA (PubMed: [29925947](http://www.uniprot.org/citations/29925947)). Plays a role

in the assembly of the gamma-tubulin ring complex (gTuRC), which regulates the minus-end nucleation of alpha-beta tubulin heterodimers that grow into microtubule protofilaments (PubMed:<a href="http://www.uniprot.org/citations/39321809" target="\_blank">39321809</a>, PubMed:<a href="http://www.uniprot.org/citations/38609661" target="\_blank">38609661</a>). Part of the ACTR1A/ACTB filament around which the dynactin complex is built (By similarity). The dynactin multiprotein complex activates the molecular motor dynein for ultra-processive transport along microtubules (By similarity).

#### Cellular Location

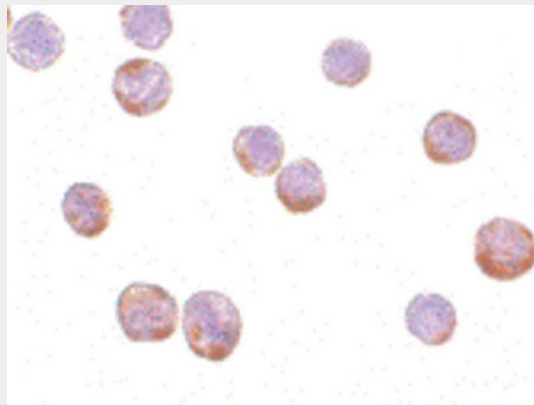
Cytoplasm, cytoskeleton. Nucleus Note=Localized in cytoplasmic mRNP granules containing untranslated mRNAs.

#### ACTB / Beta Actin Antibody (N-Terminus) - Protocols

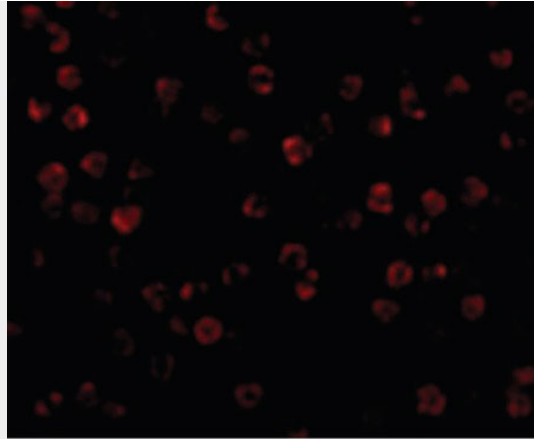
Provided below are standard protocols that you may find useful for product applications.

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

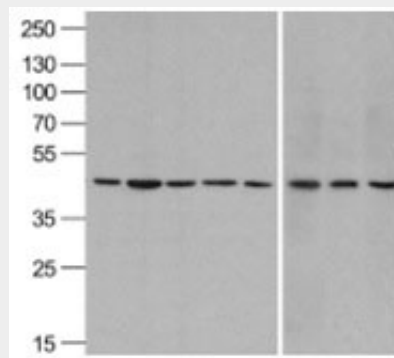
#### ACTB / Beta Actin Antibody (N-Terminus) - Images



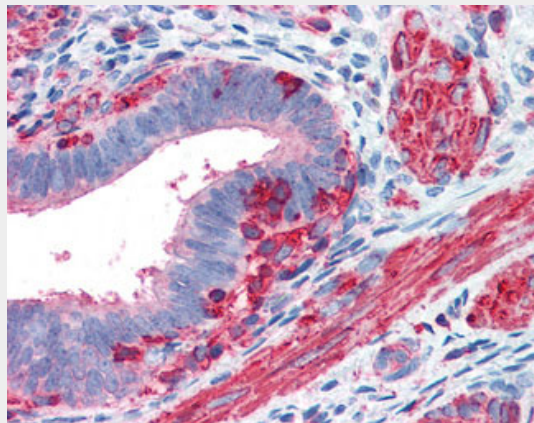
Immunocytochemistry of Actin in HeLa cells with Actin antibody at 1 ug/ml.



Immunofluorescence of Beta-actin in HeLa cells with Beta-actin antibody at 2 ug/ml.



Western blot analysis of beta-actin in A431, Daudi, HepG2, HL60, Jurkat, Human brain, Mouse...



Anti-Beta Actin antibody IHC of human uterus.

### **ACTB / Beta Actin Antibody (N-Terminus) - Background**

Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells.

### **ACTB / Beta Actin Antibody (N-Terminus) - References**

- Ponte P., et al. Nucleic Acids Res. 12:1687-1696(1984).
- Nakajima-Iijima S., et al. Proc. Natl. Acad. Sci. U.S.A. 82:6133-6137(1985).
- Ohmori H., et al. J. Cell Biol. 116:933-941(1992).
- Hillier L.W., et al. Nature 424:157-164(2003).
- Gevaert K., et al. Nat. Biotechnol. 21:566-569(2003).

