

ACTB / Beta Actin Antibody (clone 1E7)
Mouse Monoclonal Antibody
Catalog # ALS14305

Specification

ACTB / Beta Actin Antibody (clone 1E7) - Product Information

Application	WB, IHC
Primary Accession	P60709
Reactivity	Human, Mouse, Rat
Host	Mouse
Clonality	Monoclonal
Calculated MW	42kDa KDa

ACTB / Beta Actin Antibody (clone 1E7) - Additional Information

Gene ID 60

Other Names

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

Target/Specificity

Human Beta Actin

Reconstitution & Storage

Aliquot and store at -20°C or -80°C. Avoid freeze-thaw cycles.

Precautions

ACTB / Beta Actin Antibody (clone 1E7) is for research use only and not for use in diagnostic or therapeutic procedures.

ACTB / Beta Actin Antibody (clone 1E7) - 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)). Part of the ACTR1A/ACTB filament around which the dynactin complex is built. The dynactin multiprotein complex activates the molecular motor dynein for ultra-processive transport along microtubules (By similarity).

Cellular Location

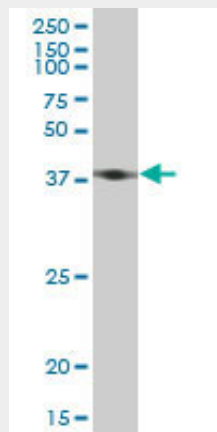
Cytoplasm, cytoskeleton. Nucleus Note=Localized in cytoplasmic mRNP granules containing untranslated mRNAs.

ACTB / Beta Actin Antibody (clone 1E7) - Protocols

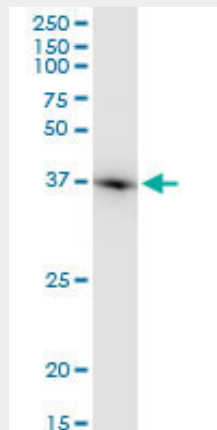
Provided below are standard protocols that you may find useful for product applications.

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

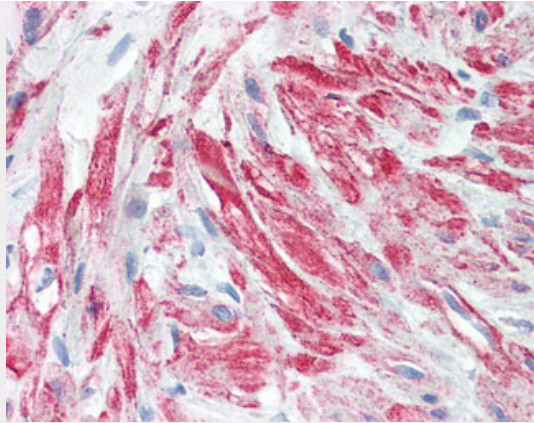
ACTB / Beta Actin Antibody (clone 1E7) - Images



Western blot of ACTB expression in Jurkat.



Western blot of ACTB expression in NIH/3T3.



Anti-Beta Actin antibody IHC of human prostate, stroma.

ACTB / Beta Actin Antibody (clone 1E7) - 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 (clone 1E7) - 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).