

**beta Actin Antibody**  
Rabbit mAb  
Catalog # AP90016

## Specification

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### beta Actin Antibody - Product Information

Application **WB, IHC, ICC**  
Primary Accession [P60709](#)  
Clonality **Monoclonal**  
**Other Names**  
ACTIN; ACTB; BETA-ACTIN; beta actin; actin beta;

Isotype **Rabbit IgG**  
Host **Rabbit**  
Calculated MW **41737 Da**

### beta Actin Antibody - Additional Information

Purification **Affinity-chromatography**  
Immunogen **A synthesized peptide derived from human beta Actin**  
Description **beta-Actin is one of six different actin isoforms that have been identified. The actin molecules found in cells of various species and tissues tend to be very similar in their immunological and physical properties. Therefore, Antibodies against beta-Actin are useful as loading controls for Western Blotting. However it should be noted that levels of beta-Actin may not be stable in certain cells. For example, expression of beta-Actin in adipose tissue is very low and therefore it should not be used as loading control for these tissues. Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.**

Storage Condition and Buffer

### beta Actin Antibody - 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:<a href="http://www.uniprot.org/citations/29581253" target="\_blank">29581253</a>). 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:<a href="http://www.uniprot.org/citations/29925947" target="\_blank">29925947</a>). 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

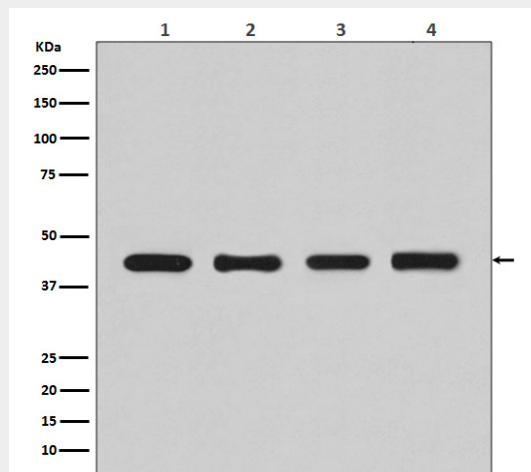
Cytoplasm, cytoskeleton. Nucleus Note=Localized in cytoplasmic mRNP granules containing untranslated mRNAs.

#### beta Actin Antibody - Protocols

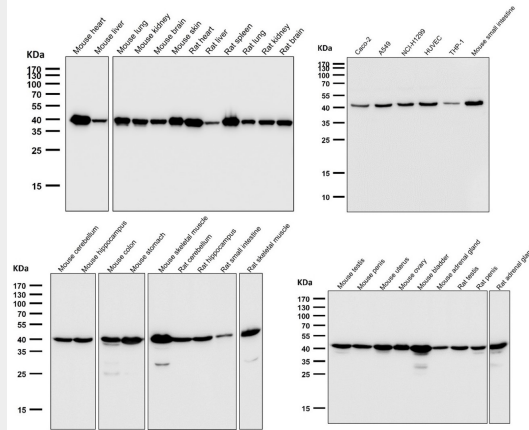
Provided below are standard protocols that you may find useful for product applications.

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

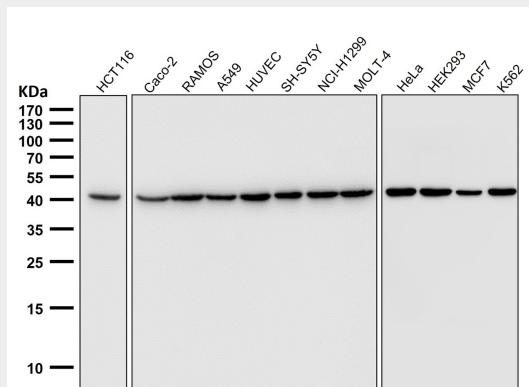
#### beta Actin Antibody - Images



Western blot analysis of beta Actin expression in (1)HeLa cell lysate; (2)Human fetal kidney lysate; (3) NIH/3T3 cell lysate; (4) PC-12 cell lysate.



All lanes use AP90016 beta Actin Antibody at 1:40000 dilution for 1 hour at room temperature.



All lanes use AP90016 beta Actin Antibody at 1:50000 dilution for 1 hour at room temperature.