

beta Actin Antibody

Rabbit mAb

Catalog # AP90016

Product Information

Application	WB, IHC, IF, ICC, IHF
Primary Accession	P60709
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	ACTIN; ACTB; BETA-ACTIN; beta actin; actin beta;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	41737

Additional Information

Dilution	WB 1:5000~1:50000 IHC 1:50~1:200 ICC/IF 1:50~1:200
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.
Storage Condition and Buffer	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.

Protein Information

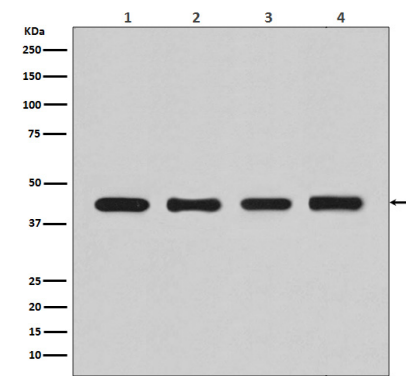
Name	ACTB
Function	Actin is a highly conserved protein that polymerizes to produce filaments that form cross-linked networks in the cytoplasm of cells (PubMed: 25255767 , PubMed: 29581253). Actin exists in both monomeric (G-actin) and polymeric (F-actin) forms, both forms playing key functions, such as cell motility and contraction (PubMed: 29581253). 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). 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: 39321809 , PubMed: 38609661). 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).

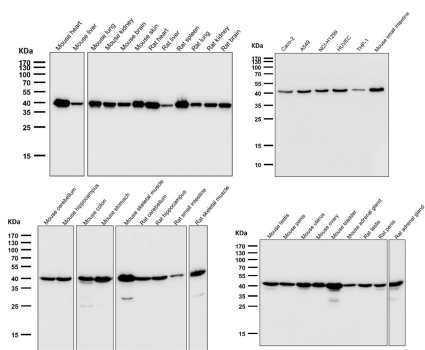
Cellular Location

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

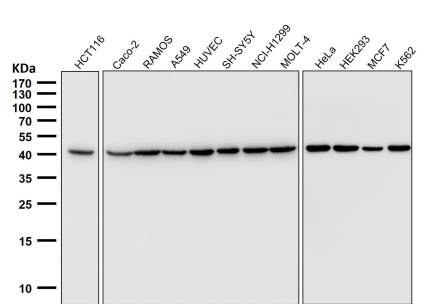
Images



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.

Image not found : 202311/AP90016-wb4.jpg

Schisandrin B inhibits cell proliferation and induces apoptosis in human cholangiocarcinoma cells. -Oncology Reports

Image not found : 202311/AP90016-wb5.jpg

Chloride intracellular channel 1 regulates the antineoplastic effects of metformin in gallbladder cancer cells. -cancer science

Image not found : 202311/AP90016-wb6.jpg

JLX001 Modulated the Inflammatory Reaction and Oxidative Stress in pMCAO Rats via Inhibiting the TLR2/4-NF-κB Signaling Pathway. -Neurochemical Research

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