

Anti-beta-Actin (Loading Control) antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP50879

Specification

Anti-beta-Actin (Loading Control) antibody - Product Information

Application WB
Primary Accession P60709

Reactivity
Host
Rat, Pig, Bovine, Dog, Cat
Rabbit

Clonality Polyclonal

Calculated MW H=42;M=42;R=42; KDa

Anti-beta-Actin (Loading Control) antibody - Additional Information

Gene ID 60

Other Names

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

Dilution

WB~~1:100~1:500

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 $^{\circ}$ C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 $^{\circ}$ C.

Anti-beta-Actin (Loading Control) 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: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). 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



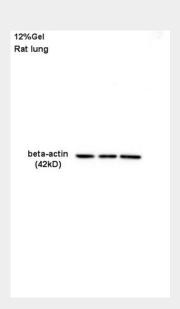
Cytoplasm, cytoskeleton. Nucleus Note=Localized in cytoplasmic mRNP granules containing untranslated mRNAs.

Anti-beta-Actin (Loading Control) antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-beta-Actin (Loading Control) antibody - Images



Rat lung lysate 30ug, probed AP50879 at 1:200 overnight in 4°C. Followed by conjugation to the secondary antibody at 1:3000 90min in 37°C. Predicted and observed band size: 42kDa.

Anti-beta-Actin (Loading Control) antibody - Background

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

Anti-beta-Actin (Loading Control) antibody - References

Ponte P., et al. Nucleic Acids Res. 12:1687-1696(1984). Nakajima-lijima 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).