**Beta-actin Antibody**
Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM1021B

**Specification**

**Beta-actin Antibody - Product Information**

<table>
<thead>
<tr>
<th>Application</th>
<th>WB, IHC-P,E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Accession</td>
<td>P60709</td>
</tr>
<tr>
<td>Reactivity</td>
<td>Human, Mouse, Rat</td>
</tr>
<tr>
<td>Host</td>
<td>Mouse</td>
</tr>
<tr>
<td>Clonality</td>
<td>Monoclonal</td>
</tr>
<tr>
<td>Isotype</td>
<td>IgG</td>
</tr>
<tr>
<td>Clone Names</td>
<td>8H10D10</td>
</tr>
</tbody>
</table>

**Beta-actin Antibody - Additional Information**

**Gene ID** 60

**Other Names**
Actin, cytoplasmic 1, Beta-actin, Actin, cytoplasmic 1, N-terminally processed, ACTB

**Target/Specificity**
ACTB recombinant protein is used to produce this monoclonal antibody.

**Dilution**
- WB: 1:1000
- IHC-P: 1:10-50

**Format**
Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

**Storage**
maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**
Beta-actin Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Beta-actin Antibody - Protein Information**

**Name** ACTB

**Function**
Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells.
Cellular Location
Cytoplasm, cytoskeleton. 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

Western blot analysis of lysates from HepG2, HL-60, mouse NIH/3T3 cell line, mouse cerebellum and rat stomach tissue lysate, CHO, COS-7 cell line lysate(from left to right), using Beta-actin Antibody(Cat. #AM1021b). AM1021b was diluted at 1:1000 at each lane. A goat anti-mouse IgG H&L(HRP) at 1:3000 dilution was used as the secondary antibody. Lysates at 35μg per lane.

Immunohistochemical analysis of paraffin-embedded H. spleen section using Beta-actin Antibody(Cat#AM1021b). AM1021b was diluted at 1:25 dilution. A peroxidase-conjugated goat anti-mouse IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.

Beta-actin Antibody - Background
This gene encodes one of six different actin proteins. Actins are highly conserved proteins that are involved in cell motility, structure, and integrity. This actin is a major constituent of the contractile apparatus and one of the two nonmuscle cytoskeletal actins.

Beta-actin Antibody - References
Sex-specific proteome differences in the anterior
cingulate cortex of schizophrenia.

Beta-actin Antibody - Citations

- The anti-malaria drug artesunate inhibits cigarette smoke and ovalbumin concurrent exposure-induced airway inflammation and might reverse glucocorticoid insensitivity.
- Proteomic Analysis of Cortical Brain Tissue from the BTBR Mouse Model of Autism: Evidence for Changes in Stop and Myelin-Related Proteins.
- The association of HLA-G and immune markers in recurrent miscarriages.
- Ancestral TCDD exposure promotes epigenetic transgenerational inheritance of imprinted gene Igf2: Methylation status and DNMTs.
- Req3q Promotes Pancreatic Carcinogenesis in a Murine Model of Chronic Pancreatitis.
- IGFBP7 promotes hemocyte proliferation in small abalone Haliotis diversicolor, proved by dsRNA and cap mRNA exposure.
- Interference with HMGB1 increases the sensitivity to chemotherapy drugs by inhibiting HMGB1-mediated cell autophagy and inducing cell apoptosis.
- KDM6B induces epithelial-mesenchymal transition and enhances clear cell renal cell carcinoma metastasis through the activation of SLUG.
- Autophagy activation attenuates renal ischemia-reperfusion injury in rats.
- Poly(A) polymerase and the nuclear poly(A) binding protein, PABPN1, coordinate the splicing and degradation of a subset of human pre-mRNAs.
- Nuclear Factor I-C promotes proliferation and differentiation of apical papilla-derived human stem cells in vitro.
- Erythropoietin pretreatment exerts anti-inflammatory effects in hepatic ischemia/reperfusion-injured rats via suppression of the TLR2/NF-κB pathway.
- Characterization of the zebrafish Ugt repertoire reveals a new class of drug-metabolizing UDP glucuronosyltransferases.
- The Changes of 8-OHdG, hOGG1, APE1 and Pol β in Lenses of Patients with Age-Related Cataract.
- MCL-1 degradation mediated by JNK activation via MEKK1/TAK1-MKK4 contributes to anticancer activity of new tubulin inhibitor MT189.
- Regulatory interplay between NFIC and TGF-β1 in apical papilla-derived stem cells.
- Focal adhesion kinases and calcium/calmodulin-dependent protein kinases regulate protein tyrosine phosphorylation in stallion sperm.
- XAF1 contributes to dengue virus-induced apoptosis in vascular endothelial cells.
- Insulin-like growth factor binding protein 7, a member of insulin-like growth factor signal pathway, involved in immune response of small abalone Haliotis diversicolor.
- Insulin-like growth factor 1 enhances the proliferation and osteogenic differentiation of human periodontal ligament stem cells via ERK and INK MAPK pathways.
- Reversal of cocaine-conditioned place preference through methyl supplementation in mice: altering global DNA methylation in the prefrontal cortex.
- Dentinogenic capacity: immature root papilla stem cells versus mature root pulp stem cells.
- Levels of Rabs and WAVE family proteins associated with translocation of GLUT4 to the cell surface in endometria from hyperinsulinemic PCOS women.