<table>
<thead>
<tr>
<th><strong>β-actin Monoclonal Antibody(5B7)</strong></th>
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<tbody>
<tr>
<td><strong>Catalog No:</strong> YM3028</td>
</tr>
<tr>
<td><strong>Reactivity:</strong> Human, Rat, Mouse, Mk, Dg, Ch, Hamster, Rb, Insect</td>
</tr>
<tr>
<td><strong>Applications:</strong> IF, WB, IHC-p</td>
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<tr>
<td><strong>Gene Name:</strong> ACTB</td>
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<tr>
<td><strong>Protein Name:</strong> Actin cytoplasmic 1</td>
</tr>
<tr>
<td><strong>Human Gene Id:</strong> 60</td>
</tr>
<tr>
<td><strong>Human Swiss Prot No:</strong> P60709</td>
</tr>
<tr>
<td><strong>Mouse Gene Id:</strong> 11461</td>
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<tr>
<td><strong>Mouse Swiss Prot No:</strong> P60710</td>
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<tr>
<td><strong>Rat Gene Id:</strong> 81822</td>
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<tr>
<td><strong>Rat Swiss Prot No:</strong> P60711</td>
</tr>
<tr>
<td><strong>Immunogen:</strong> Synthetic Peptide of β-actin</td>
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<tr>
<td><strong>Specificity:</strong> The antibody detects endogenous β-actin protein.</td>
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<tr>
<td><strong>Formulation:</strong> PBS, pH 7.4, containing 0.02% sodium azide as Preservative and 50% Glycerol.</td>
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<tr>
<td><strong>Source:</strong> Mouse</td>
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<td><strong>Purification:</strong> The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.</td>
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<td><strong>Concentration:</strong> 1 mg/ml</td>
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</tbody>
</table>
Storage Stability: -20 ºC/1 year

Molecular Weight: 41737

Observed Band: 43

Cell Pathway:
- Focal adhesion
- Adherens_Junction
- Leukocyte transendothelial migration
- Regulates Actin and Cytoskeleton
- Vibrio cholerae infection
- Pathogenic Escherichia coli infection
- Hypertrophic ca

Background:
actin beta (ACTB) Homo sapiens 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. [provided by RefSeq, Jul 2008],

Function:
disease: Defects in ACTB are a cause of dystonia juvenile-onset (DYTJ) [MIM:607371]. DYTJ is a form of dystonia with juvenile onset. Dystonia is defined by the presence of sustained involuntary muscle contraction, often leading to abnormal postures. DYTJ patients manifest progressive, generalized, dopa-unresponsive dystonia, developmental malformations and sensory hearing loss.
function: Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells.
miscellaneous: In vertebrates 3 main groups of actin isoforms, alpha, beta and gamma have been identified. The alpha actins are found in muscle tissues and are a major constituent of the contractile apparatus. The beta and gamma actins coexist in most cell types as components of the cytoskeleton and as mediators of internal cell motility.
similarity: Belongs to the

Subcellular Location:
nuclear chromatin, extracellular space, nucleoplasm, cytoplasm, cytosol, cytoskeleton, plasma membrane, focal adhesion, membrane, intracellular ribonucleoprotein complex, cortical cytoskeleton, NuA4 histone acetyltransferase complex, cyt

Expression:
- B-cell lymphoma
- Brain
- Cajal-Retzius cell
- Eye
- Fetal brain cortex
- Foreskin
- Hepatocellular car

Products Images
Western blot analysis of 1 HEK293 2 SW480 3 HEPG2 4 MCF-7
5 mouse brain 6 Rat brain 7 Hela 8 A549 lysates, primary
antibody was diluted at 1:5000, 4° over night, secondary
antibody(cat: RS23910 was diluted at 1:10000, 37° 1hour.

Immunohistochemical analysis of paraffin-embedded Human-
lung tissue. 1,β-actin Monoclonal Antibody(5B7) was diluted at
1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for
antibody retrieval(>98 °C,20min). 3,Secondary antibody was
diluted at 1:200(room tempeRature, 30min). Negative control was
used by secondary antibody only.

Immunohistochemical analysis of paraffin-embedded Rat-testis
tissue. 1,β-actin Monoclonal Antibody(5B7) was diluted at
1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for
antibody retrieval(>98 °C,20min). 3,Secondary antibody was
diluted at 1:200(room tempeRature, 30min). Negative control was
used by secondary antibody only.
Immunohistochemical analysis of paraffin-embedded Mouse-liver tissue. 1, β-actin Monoclonal Antibody (5B7) was diluted at 1:200 (4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C, 20 min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30 min). Negative control was used by secondary antibody only.

Western blot analysis of Hela (1) Rat brain (2) Mouse brain (3) Chicken lung (4) and Rabbit testis (5), diluted at 1:10000.

IHC Staining of Human ovary tissue, diluted at 1:200