Product Datasheet

beta-Actin Antibody
NB600-532

Unit Size: 0.1 mg
Store at 4C. Do not freeze.

Reviews: 5  Publications: 37

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Updated 8/22/2018 v.20.1

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# NB600-532

## beta-Actin Antibody

### Product Information

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit Size</td>
<td>0.1 mg</td>
</tr>
<tr>
<td>Concentration</td>
<td>1 mg/ml</td>
</tr>
<tr>
<td>Storage</td>
<td>Store at 4°C. Do not freeze.</td>
</tr>
<tr>
<td>Clonality</td>
<td>Polyclonal</td>
</tr>
<tr>
<td>Preservative</td>
<td>0.09% Sodium Azide</td>
</tr>
<tr>
<td>Isotype</td>
<td>IgG</td>
</tr>
<tr>
<td>Purity</td>
<td>Immunogen affinity purified</td>
</tr>
<tr>
<td>Buffer</td>
<td>Tris-Citrate/Phosphate (pH 7.0 - 8.0)</td>
</tr>
<tr>
<td>Target Molecular Weight</td>
<td>40 kDa</td>
</tr>
</tbody>
</table>

### Product Description

- **Host**: Rabbit
- **Gene ID**: 60
- **Gene Symbol**: ACTB
- **Species**: Human, Mouse

**Reactivity Notes**: Based on 100% sequence identity, this antibody is predicted to react with X. tropicalis, Panda, Orangutan, Gorilla, Chimpanzee, Medaka fish, Australian taipan, Emu, Duckbill platypus and King baboon spider.

**Immunogen**: A region corresponding to the N-terminus of human Beta Actin [UniProt# P60709]

### Product Application Details

- **Applications**: Western Blot, Simple Western, Immunohistochemistry, ICC/IF (Negative)
- **Recommended Dilutions**: Western Blot 1:5000-1:15000, Simple Western 1:2000, Immunohistochemistry, ICC/IF (Negative)
- **Application Notes**: This antibody is useful for Western Blot. A 40 kDa band is detected in HeLa whole cell lysate and mouse NIH3T3 cells. This antibody is also useful for immunocytochemistry/immunofluorescence.

  In Simple Western only 10 - 15 uL of the recommended dilution is used per data point. Separated by Size-Wes, Sally Sue/Peggy Sue.

  The observed molecular weight of the protein may vary from the listed predicted molecular weight due to post translational modifications, post translation cleavages, relative charges, and other experimental factors.
Western Blot: beta-Actin Antibody [NB600-532] - Detection of actin in 3T3 (20ug) lysates ECL detection 30 seconds. Lane 1 - 1:15,000 dilution Lane 2 - 1:10,000 dilution Lane 3 - 1:15,000 dilution.

Western Blot: beta-Actin Antibody [NB600-532] - Samples: Whole cell lysate (50 ug) from HeLa, 293T, Jurkat, mouse TCMK-1, and mouse NIH3T3 cells prepared using NETN lysis buffer. Antibody: Affinity purified rabbit anti-Cytoskeletal Actin antibody used for WB at 0.1 ug/ml. Detection: Chemiluminescence with an exposure time of 10 seconds.

Simple Western: beta-Actin Antibody [NB600-532] - Simple Western lane view shows a specific band for Beta Actin in 0.05 mg/ml of HeLa lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system.

Western Blot: beta-Actin Antibody [NB600-532] - Western blot analysis of Actin (NB600-532) using HepG2 whole cell lysate [NBP1-42569].

Western Blot: beta-Actin Antibody [NB600-532] - Western blot analysis of Actin (NB600-532) using RCC4 whole cell lysate [NBP1-30412].

Western Blot: beta-Actin Antibody [NB600-532] - Detection of Beta Actin. Lane 1: 5µg, nuclear extract from mouse bone marrow derived macrophages. Lane 2: 10µg, cytoplasmic extract from mouse bone marrow derived macrophages. Image provided via product review by verified customer.

### Publications

<table>
<thead>
<tr>
<th>Citation</th>
<th>Title</th>
<th>PubMed ID</th>
<th>Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paez-Mayorga J, Chen AL, Kotla S et al.</td>
<td>Ponatinib Activates an Inflammatory Response in Endothelial Cells via ERK5 SUMOylation. Front Cardiovasc Med Sep 6 2018 12:00AM</td>
<td>30238007</td>
<td>WB, Human</td>
</tr>
<tr>
<td>Hardaway A, Herroon M, Rajagurubandara Ei, Podgorski I.</td>
<td>Marrow adipocyte-derived CXCL1 and CXCL2 contribute to osteolysis in metastatic prostate cancer. Clin Exp Metastasis 2015</td>
<td>25802102</td>
<td>WB, Mouse</td>
</tr>
<tr>
<td>Adamiak Mateusz, Suszynska Malwina, Abdel-Latif Ahmed et al.</td>
<td>The Involvement of Hematopoietic-Specific PLC-B2 in Homing and Engraftment of Hematopoietic Stem/Progenitor Cells. Stem Cell Reviews 2016</td>
<td>27704316</td>
<td>WB, Mouse</td>
</tr>
<tr>
<td>Frey-Jakobs S, Hartberger JM, Fliegauf M et al.</td>
<td>ZNF341 controls STAT3 expression and thereby immunocompetence</td>
<td>29907690</td>
<td>WB, Human</td>
</tr>
</tbody>
</table>

**Details:**

This citation used the HRP version of this antibody.

Ueno K, Samura M, Nakamura T et al. Increased plasma VEGF levels following ischemic preconditioning are associated with downregulation of miRNA-762 and miR-3072-5p. Sci Rep. Dec 1 2016 12:00AM | 27905554 |

Li Y, Chen D, Li Y et al. Oncogenic cAMP responsive element binding protein 1 is overexpressed upon loss of tumor suppressive miR-10b-5p and miR-363-3p in renal cancer. Oncol Rep 2016 Apr | 26796749 |


Procedures

Protocol specific for Beta Actin Antibody (NB600-532)

Western Blot Protocol

1. Perform SDS-PAGE (4-12%) on samples to be analyzed, loading 20 ug of total protein per lane.

2. Transfer proteins to Nitrocellulose according to the instructions provided by the manufacturer of the transfer apparatus.

3. Stain the blot using ponceau S for 1-2 minutes to access the transfer of proteins onto the nitrocellulose membrane. Rinse the blot in water to remove excess stain and mark the lane locations and locations of molecular weight markers using a pencil.

4. Rinse the blot in TBS for approximately 5 minutes.

5. Block the membrane using 5% non-fat dry milk + 1% BSA in TBS for 1 hour.

6. Dilute the rabbit anti-actin primary antibody (NB 600-532) in blocking buffer and incubate 2 hours at room temperature.

7. Wash the membrane in water for 5 minutes and apply the diluted rabbit-IgG HRP-conjugated secondary antibody in blocking buffer (as per manufacturer's instructions) and incubate 1 hour at room temperature.

8. Wash the blot in TBS containing 0.05-0.1% Tween-20 for 10-20 minutes.

9. Wash the blot in type I water for an additional 10-20 minutes (this step can be repeated as required to reduce background).

10. Apply the detection reagent of choice in accordance with the manufacturer's instructions (Amersham's ECL is the standard reagent used at Novus Biologicals).

Note: Tween-20 can be added to the blocking buffer at a final concentration of 0.05-0.2%, provided it does not interfere with antibody-antigen binding.
Limitations
This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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