

# Product Datasheet

## beta-Actin Antibody NB600-503SS

Unit Size: 0.025 ml

Store at 4C. Do not freeze.

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**Reviews: 3 Publications: 61**

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Updated 6/15/2014 v.20.1

**NB600-503SS**

beta-Actin Antibody

| Product Information  |                                |
|----------------------|--------------------------------|
| <b>Unit Size</b>     | 0.025 ml                       |
| <b>Concentration</b> | 1.0 mg/ml                      |
| <b>Storage</b>       | Store at 4C. Do not freeze.    |
| <b>Clonality</b>     | Polyclonal                     |
| <b>Preservative</b>  | 0.09% Sodium Azide             |
| <b>Purity</b>        | Immunogen affinity purified    |
| <b>Buffer</b>        | Tris-citrate/phosphate, pH 7-8 |

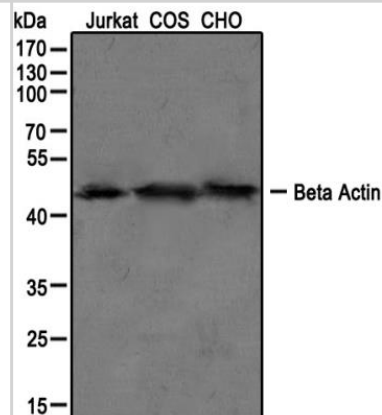
| Product Description       |   |
|---------------------------|---|
| <b>Host</b>               | Rabbit  |
| <b>Gene ID</b>            | 60  |
| <b>Gene Symbol</b>        | ACTB  |
| <b>Species</b>            | Human, Mouse, Rat, Avian, Chinese Hamster, Primate, Porcine, Rabbit   |
| <b>Species Reactivity</b> | Human, Rat, Monkey, Mouse and Avian. Rabbit reactivity reported in the scientific literature (PMID: 23813946). Expected to cross-react with a wide range of species due to sequence homology. |
| <b>Immunogen</b>          | A synthetic peptide made to an N-terminal region of human Beta Actin. [UniProt P60709].   |

| Product Application Details  |   |
|------------------------------|---|
| <b>Applications</b>          | Western Blot, Simple Western, Blocking/Neutralizing, Enzyme Immunoassay, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, Immunoprecipitation, Proximity Ligation Assay   |
| <b>Recommended Dilutions</b> | Immunohistochemistry 1:100, Immunohistochemistry-Paraffin 1:100, Immunoprecipitation 1:10-1:500, Western Blot 1:100-1:2000, Blocking/Neutralizing, Enzyme Immunoassay, Immunocytochemistry/Immunofluorescence, Proximity Ligation Assay, Simple Western 1:12.5  |
| <b>Application Notes</b>     | Prior to immunostaining paraffin tissues, antigen retrieval with sodium citrate buffer (pH 6.0) is recommended. Immunocytochemistry/Immunofluorescence, Blocking/Neutralizing and Enzyme Immunoassay were reported in scientific literature. Customer review using ICC. Use in Proximity Ligation Assay reported in scientific literature (PMID 24740405) In Simple Western only 10-15 uL of the recommended dilution is used per data point. |

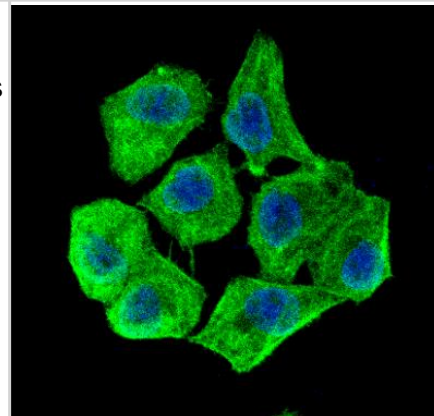


## Images

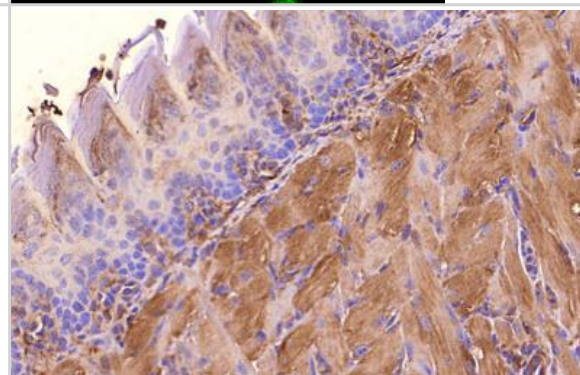
Western Blot: Beta Actin Antibody [NB600-503] - Western blot analysis of Jurkat, COS, and CHO cell lysate using beta actin antibody at 1:100.



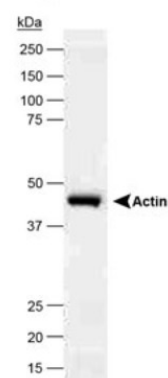
Immunocytochemistry/Immunofluorescence: Beta Actin Antibody [NB600-503] - IF Confocal analysis of HeLa cells using Beta Actin antibody (NB600-503, 1:5). An Alexa Fluor 488-conjugated Goat to rabbit IgG was used as secondary antibody (green). DAPI was used to stain the cell nuclei (blue).



Immunohistochemistry: Beta Actin Antibody [NB600-503] - Analysis of Beta Actin in mouse epidermis using DAB with hematoxylin counterstain.



Western Blot: Beta Actin Antibody [NB600-503] - Rabbit polyclonal at 1/5000.



Simple Western: beta-Actin Antibody [NB600-503] - Simple Western lane view shows a specific band for Beta Actin in 0.1 mg/ml of HeLa lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system.



## Publications

Golden D, Cantley LG. Casein kinase 2 prevents mesenchymal transformation by maintaining Foxc2 in the cytoplasm. *Oncogene*. 2014 Dec 08 [PMID: 25486430] (WB, Human, Mouse)

### Details:

Beta actin antibody used for WB as loading control in experiments involving MCF10A cells, MDA-MB-436 cells, MDA-MB-231 cells and MPT cells (immortalized epithelial cells derived from the mouse proximal tubule).

Hsu TM, Konanur VR, Taing L et al. Effects of sucrose and high fructose corn syrup consumption on spatial memory function and hippocampal neuroinflammation in adolescent rats. *Hippocampus*. 2014 Sep 20 [PMID: 25242636] (WB)

Sbaraglini ML. Efectos del tratamiento oral con inhibidores de dipeptidilpeptidasa-4 y biguanidas sobre el metabolismo oseo thesis. 1905 Jul 06 (WB, Mouse, Rat)

### Details:

Beta Actin antibody used in WB as loading control/ housekeeping gene expression in MC3T3E1 and bone marrow progenitor cells (CPMO; isolated from Sprague Dawley Rats)

Palmer LA, deRonde K, Brown-Steinke K et al. Hypoxia-Induced Changes in Protein S-nitrosylation in Female Mouse Brainstem *Am. J. Respir. Cell Mol. Biol.* 2014 Jun 12 [PMID: 24922346] (WB, Mouse)

### Details:

Antibody used for WB in hypoxia treated/or not female GSNOR+/- and GSNO-/- mice

Holden VI, Lenio S, Kuick R et al. Bacterial siderophores that evade or overwhelm Lipocalin 2 induce HIF-1a and pro-inflammatory cytokine secretion in cultured respiratory epithelial cells *Infect. Immun.* 2014 Jun 30 [PMID: 24980968] (WB, Human)

### Details:

Beta actin antibody used for WB at 1:5000 dilution in A549 respiratory epithelial cells stimulated with 50 uM Enterobactin (Ent, a bacterial siderophore), 3 mM Dimethylxaloylglycine/DMOG (dioxygenase inhibitor), or 25 ?M protein Lipocalin 2/Lcn2 (Figure Figure 6 A and B).

Calabrese B, Saffin JM, Halpain S. Activity-Dependent Dendritic Spine Shrinkage and Growth Involve Downregulation of Cofilin via Distinct Mechanisms. *PLoS ONE* 2014 Apr 17 [PMID: 24740405] (PLA, Rat)

Bielinska AU, Makidon PE, Janczak KW et al. Distinct Pathways of Humoral and Cellular Immunity Induced with the Mucosal Administration of a Nanoemulsion Adjuvant. *J. Immunol.* 2014 Feb 17 [PMID: 24532579] (WB, Human, Mouse)

Lin YC, Lee YC, Li LH, Yang RB. Tumor suppressor SCUBE2 inhibits breast-cancer cell migration and invasion through the reversal of epithelial-mesenchymal transition. *J. Cell. Sci.* 2014 Jan 1 [PMID: 24213532] (WB, Human)

Popescu CR, Sutherland MR, Cloutier A et al. Hyperoxia Exposure Impairs Nephrogenesis in the Neonatal Rat: Role of HIF-1alpha. *PLoS One* 2013 Dec 17 [PMID: 24358181] (WB, Rat)

Herroon MK, Rajagurubandara E, Hardaway AL et al. Bone marrow adipocytes promote tumor growth in bone via FABP4-dependent mechanisms. *Oncotarget* 2013 Nov [PMID: 24240026] (WB, Human)

Wang L, Wu Y, Tan Y et al. Cytotoxic effects of the quinolone levofloxacin on rabbit meniscus cells. *J Appl Toxicol* 2013 Jul 1 [PMID: 23813946] (WB, Rabbit)

Forristal CE, Winkler IG, Nowlan B et al. Pharmacological stabilization of HIF-1alpha increases hematopoietic stem cell quiescence in vivo and accelerates blood recovery following severe irradiation. *Blood* 2012 Dec 14 [PMID: 23243286]

More publications at <http://www.novusbio.com/NB600-503>





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### **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.

**For more information on our guarantee, please visit [www.novusbio.com/guarantee](http://www.novusbio.com/guarantee).**

