

# Product Datasheet

## NBR1 Antibody - BSA Free NBP1-71703

Unit Size: 0.1 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

[www.novusbio.com](http://www.novusbio.com)



[technical@novusbio.com](mailto:technical@novusbio.com)

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**NBP1-71703**

NBR1 Antibody - BSA Free

**Product Information**

<b>Unit Size</b>	0.1 ml
<b>Concentration</b>	1.24 mg/ml
<b>Storage</b>	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
<b>Clonality</b>	Polyclonal
<b>Preservative</b>	0.05% Sodium Azide
<b>Isotype</b>	IgG
<b>Purity</b>	Immunogen affinity purified
<b>Buffer</b>	PBS

**Product Description**

<b>Host</b>	Rabbit
<b>Gene ID</b>	4077
<b>Gene Symbol</b>	NBR1
<b>Species</b>	Human, Mouse
<b>Reactivity Notes</b>	Immunogen has 75% identity to the rat protein.
<b>Immunogen</b>	A genomic peptide made to an internal region of the human NBR1 protein (within residues 50-250). [Swiss-Prot Q14596]
<b>Notes</b>	Manufactured by Genomic Antibody Technology™. GAT <a href="#">FAQs</a>

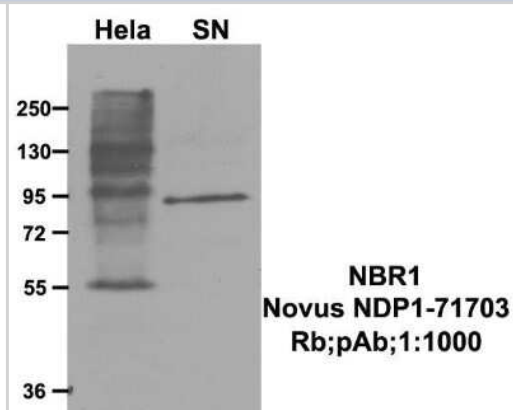
**Product Application Details**

<b>Applications</b>	Western Blot, Simple Western, ELISA, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, Sandwich ELISA Capture
<b>Recommended Dilutions</b>	Western Blot 1 - 2 ug/ml, Simple Western 1:400, ELISA, Immunohistochemistry 1:100, Immunocytochemistry/Immunofluorescence 1:100, Immunohistochemistry-Paraffin 1:100, Sandwich ELISA Capture reported by customer review
<b>Application Notes</b>	<p>Prior to immunostaining paraffin tissues, antigen retrieval with sodium citrate buffer (pH 6.0) is recommended.</p> <p>In Simple Western only 10 - 15 uL of the recommended dilution is used per data point.</p> <p>See <a href="#">Simple Western Antibody Database</a> for Simple Western validation: Tested in HepG2 lysate 0.5 mg/mL, separated by Size, antibody dilution of 1:400, apparent MW was 73 kDa. Separated by Size-Wes, Sally Sue/Peggy Sue.</p>

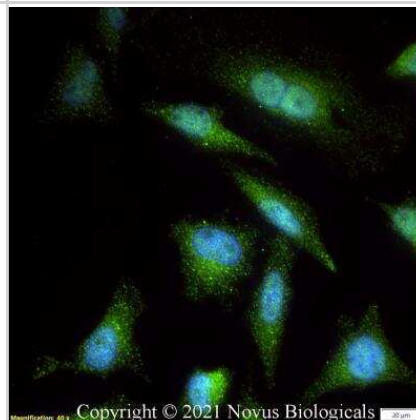


## Images

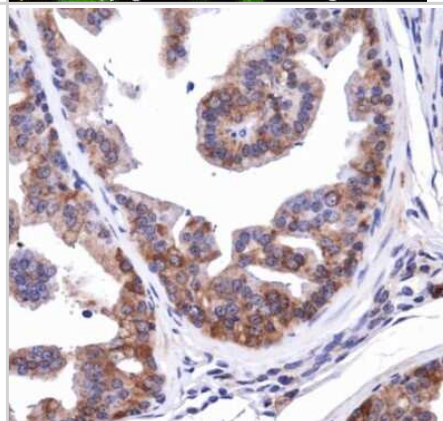
Western Blot: NBR1 Antibody [NBP1-71703] - The antibody detects HeLa cell NBR1 (about 130 kDa). It detects a 100 kDa band in mouse brain. Western blot image submitted by a verified customer review.



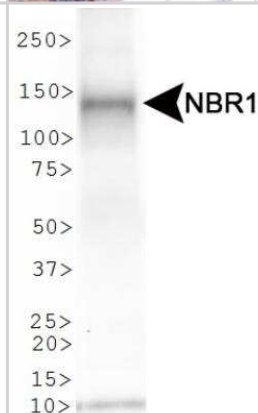
Immunocytochemistry/Immunofluorescence: NBR1 Antibody [NBP1-71703] - HeLa cells were fixed in 4% paraformaldehyde for 10 minutes and permeabilized in 0.05% Triton X-100 in PBS for 5 minutes. The cells were incubated with NBR1 Antibody (NBP1-71703) at 1 ug/ml overnight at 4C and detected with an anti-rabbit Dylight 488 (Green) at a 1:1000 dilution for 60 minutes. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 100X objective and digitally deconvolved.



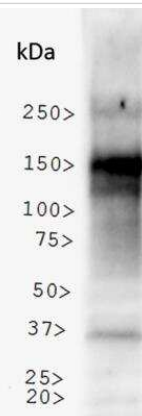
Immunohistochemistry: NBR1 Antibody [NBP1-71703] - Staining of NBR1 in mouse prostate.



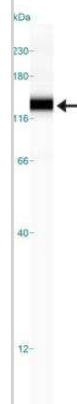
Western Blot: NBR1 Antibody [NBP1-71703] - WB analysis of NBR1 in HepG2 cell lysates.



Western Blot: NBR1 Antibody [NBP1-71703] - WB analysis of 30 ug whole cell lysate of HeLa cells using NBR1 antibody.



Simple Western: NBR1 Antibody [NBP1-71703] - Simple Western lane view shows a specific band for NBR1 in 0.5 mg/ml of HepG2 lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system.



## Publications

VAmos, A;Shaw, A;Varga, K;CsomOs, I;MocsAr, G;Balajthy, Z;LAnyi, C;Bacso, Z;SzatmAri-TOth, M;KristOf, E; Mitophagy Mediates the Beige to White Transition of Human Primary Subcutaneous Adipocytes Ex Vivo Pharmaceuticals (Basel, Switzerland) [PMID: 35337160]

Kim MJ, Hwang GY, Cho MJ et al. Depletion of NBR1 in urothelial carcinoma cells enhances rapamycin-induced apoptosis through impaired autophagy and mitochondrial dysfunction J. Cell. Biochem. 2019-07-11 [PMID: 31297862]

Di Rienzo M, Antonioli M, Fusco C et al. Autophagy induction in atrophic muscle cells requires ULK1 activation by TRIM32 through unanchored K63-linked polyubiquitin chains Sci Adv 2019-05-01 [PMID: 31123703] (WB, Mouse)

Romagnoli A, Petruccioli E, Palucci I et al. Clinical isolates of the modern Mycobacterium tuberculosis lineage 4 evade host defense in human macrophages through eluding IL-1B-induced autophagy Cell Death Dis 2018-05-24 [PMID: 29795378] (ICC/IF, Human)

Kenific CM, Stehbens SJ, Goldsmith J et al. NBR1 enables autophagy-dependent focal adhesion turnover. J Cell Biol 2016-02-22 [PMID: 26903539] (ICC/IF, Human)

Murrow L, Malhotra R, Debnath J. ATG12-ATG3 interacts with Alix to promote basal autophagic flux and late endosome function Nat. Cell Biol. 2015-03-01 [PMID: 25686249] (WB)

Malhotra R, Warne JP, Salas E et al. Loss of Atg12, but not Atg5, in pro-opiomelanocortin neurons exacerbates diet-induced obesity Autophagy. 2015-01-13 [PMID: 25585051] (WB)

Cullup T, Kho AL, Dionisi-Vici C et al. Recessive mutations in EPG5 cause Vici syndrome, a multisystem disorder with defective autophagy Nat Genet 2012-12-09 [PMID: 23222957] (ICC/IF, Human)

## Procedures

### Immunohistochemistry-Paraffin protocol for NBR1 Antibody (NBP1-71703)

#### Immunohistochemistry-Paraffin Embedded Sections

##### Antigen Unmasking:

Bring slides to a boil in 10 mM sodium citrate buffer (pH 6.0) then maintain at a sub-boiling temperature for 10 minutes. Cool slides on bench-top for 30 minutes.

##### Staining:

1. Wash sections in deionized water three times for 5 minutes each.
2. Wash sections in wash buffer for 5 minutes.
3. Block each section with 100-400 ul blocking solution for 1 hour at room temperature.
4. Remove blocking solution and add 100-400 ul diluted primary antibody. Incubate overnight at 4C.
5. Remove antibody solution and wash sections in wash buffer three times for 5 minutes each.
6. Add 100-400 ul biotinylated diluted secondary antibody. Incubate 30 minutes at room temperature.
7. Remove secondary antibody solution and wash sections three times with wash buffer for 5 minutes each.
8. Add 100-400 ul Streptavidin-HRP reagent to each section and incubate for 30 minutes at room temperature.
9. Wash sections three times in wash buffer for 5 minutes each.
10. Add 100-400 ul DAB substrate to each section and monitor staining closely.
11. As soon as the sections develop, immerse slides in deionized water.
12. Counterstain sections in hematoxylin.
13. Wash sections in deionized water two times for 5 minutes each.
14. Dehydrate sections.
15. Mount coverslips.

### Immunocytochemistry/Immunofluorescence protocol for NBR1 Antibody (NBP1-71703)

#### Immunocytochemistry Protocol

Culture cells to appropriate density in 35 mm culture dishes or 6-well plates.

1. Remove culture medium and add 10% formalin to the dish. Fix at room temperature for 30 minutes.
2. Remove the formalin and add ice cold methanol. Incubate for 5-10 minutes.
3. Remove methanol and add washing solution (i.e. PBS). Be sure to not let the specimen dry out. Wash three times for 10 minutes.
4. To block nonspecific antibody binding incubate in 10% normal goat serum from 1 hour to overnight at room temperature.
5. Add primary antibody at appropriate dilution and incubate at room temperature from 2 hours to overnight at room temperature.
6. Remove primary antibody and replace with washing solution. Wash three times for 10 minutes.
7. Add secondary antibody at appropriate dilution. Incubate for 1 hour at room temperature.
8. Remove antibody and replace with wash solution, then wash for 10 minutes. Add Hoechst 33258 to wash solution at 1:25,000 and incubate for 10 minutes. Wash a third time for 10 minutes.
9. Cells can be viewed directly after washing. The plates can also be stored in PBS containing Azide covered in Parafilm (TM). Cells can also be cover-slipped using Fluoromount, with appropriate sealing.

\*The above information is only intended as a guide. The researcher should determine what protocol best meets their needs. Please follow safe laboratory procedures.



### **Novus Biologicals USA**

10730 E. Briarwood Avenue  
Centennial, CO 80112  
USA  
Phone: 303.730.1950  
Toll Free: 1.888.506.6887  
Fax: 303.730.1966  
nb-customerservice@bio-techne.com

### **Bio-Techne Canada**

21 Canmotor Ave  
Toronto, ON M8Z 4E6  
Canada  
Phone: 905.827.6400  
Toll Free: 855.668.8722  
Fax: 905.827.6402  
canada.inquires@bio-techne.com

### **Bio-Techne Ltd**

19 Barton Lane  
Abingdon Science Park  
Abingdon, OX14 3NB, United Kingdom  
Phone: (44) (0) 1235 529449  
Free Phone: 0800 37 34 15  
Fax: (44) (0) 1235 533420  
info.EMEA@bio-techne.com

### **General Contact Information**

www.novusbio.com  
Technical Support: nb-technical@bio-techne.com  
Orders: nb-customerservice@bio-techne.com  
General: novus@novusbio.com

### **Products Related to NBP1-71703**

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HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control
NBP1-71703B	NBR1 Antibody [Biotin]

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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.

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