# **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.

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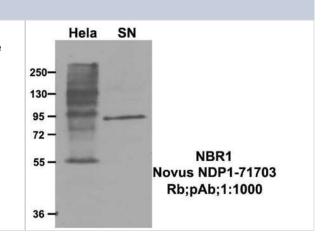
### NBP1-71703

NBR1 Antibody - BSA Free

NBR1 Antibody - BSA Free	
Product Information	
Unit Size	0.1 ml
Concentration	1.24 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.05% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS
Product Description	
Host	Rabbit
Gene ID	4077
Gene Symbol	NBR1
Species	Human, Mouse
Reactivity Notes	Immunogen has 75% identity to the rat protein.
Immunogen	A genomic peptide made to an internal region of the human NBR1 protein (within residues 50-250). [Swiss-Prot Q14596]
Notes	Manufactured by Genomic Antibody Technology™. GAT <u>FAQs</u>
Product Application Details	
Applications	Western Blot, Simple Western, ELISA, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, Sandwich ELISA Capture
Recommended Dilutions	Western Blot, Simple Western 1:400, ELISA, Immunohistochemistry 1:100, Immunocytochemistry/Immunofluorescence 1:100, Immunohistochemistry-Paraffin 1:100, Sandwich ELISA Capture reported by customer review
Application Notes	Prior to immunostaining paraffin tissues, antigen retrieval with sodium citrate buffer (pH 6.0) is recommended.

# **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.

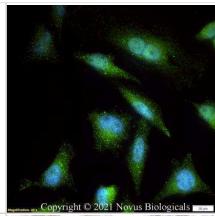




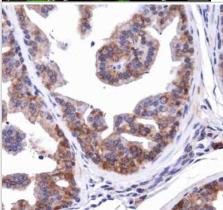
point. Separated by Size-Wes, Sally Sue/Peggy Sue.

In Simple Western only 10 - 15 uL of the recommended dilution is used per data

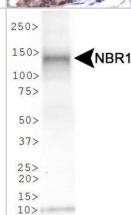
Immunocytochemistry/Immunofluorescence: NBR1 Antibody [NBP1-71703] - HeLa cells were fixed in 4% paraformaldehyde for 10 minutes and permeabilized in 0.05% Triton X-100 in PBS for 5 minutes. The cells were incubated with NBR1 Antibody (NBP1-71703) at 1 ug/ml overnight at 4C and detected with an anti-rabbit 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.



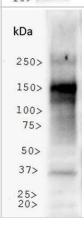
Immunohistochemistry: NBR1 Antibody [NBP1-71703] - Staining of NBRI in mouse prostate.

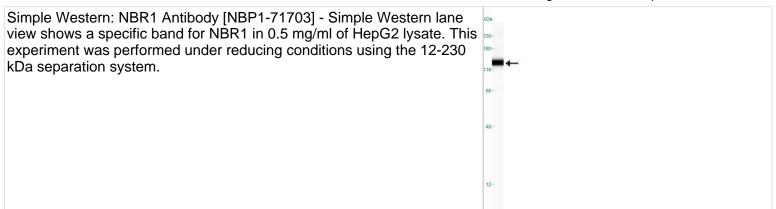


Western Blot: NBR1 Antibody [NBP1-71703] - WB analysis of NBR1 in HepG2 cell lysates.



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





#### **Publications**

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 dietinduced 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)

[[URL:https://www.novusbio.com/products/nbr1-antibody\_nbp1-71703]][[Caption:NBR1 Antibody]] 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)

[[URL:https://www.novusbio.com/products/nbr1-antibody\_nbp1-71703]][[Caption:NBR1 Antibody]] 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 1:25,0000 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.





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

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]

#### 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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