Product Datasheet

Mas Antibody - BSA Free

NBP1-78444

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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Reviews: 2 Publications: 21

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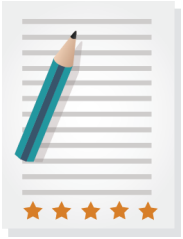
www.novusbio.com/NBP1-78444

Updated 9/9/2025 v.20.1



NBP1-78444

Mas Antibody - BSA Free

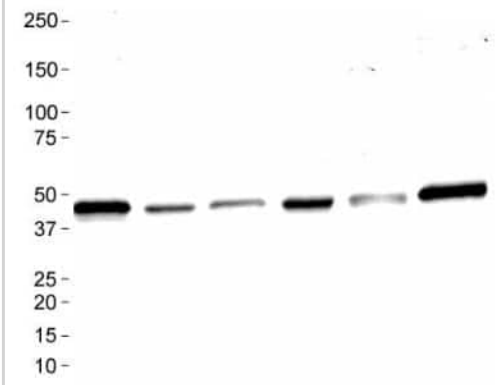
Product Information	
Unit Size	0.1 ml
Concentration	1 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.05% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS and 30% Glycerol

Product Description	
Description	Novus Biologicals Rabbit Mas Antibody - BSA Free (NBP1-78444) is a polyclonal antibody validated for use in IHC, WB, ICC/IF and Simple Western. Anti-Mas Antibody: Cited in 20 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Rabbit
Gene ID	4142
Gene Symbol	MAS1
Species	Human, Mouse, Rat, Primate, Rabbit
Reactivity Notes	Use in Rat reported in scientific literature (PMID:34558543). Rabbit reactivity reported in the scientific literature (PMID: 23701246).
Immunogen	A synthetic peptide made to an internal portion of the human MAS1 protein (between residues 75-125) [Uniprot: P04201]

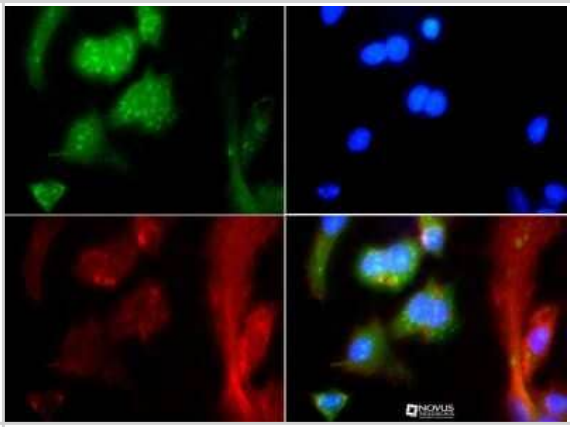
Product Application Details	
Applications	Western Blot, Simple Western, Immunohistochemistry-Paraffin, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry
Recommended Dilutions	Western Blot 1:1000, Simple Western 1:100, Immunohistochemistry 1:100, Immunocytochemistry/ Immunofluorescence 1:25, Immunohistochemistry-Paraffin 1:100
Application Notes	In Simple Western only 10 - 15 uL of the recommended dilution is used per data point. See Simple Western Antibody Database for Simple Western validation: Tested in HepG2 lysate 0.5 mg/mL, separated by Size, antibody dilution of 1:100, apparent MW was 47 kDa. Separated by Size-Wes, Sally Sue/Peggy Sue.

Images

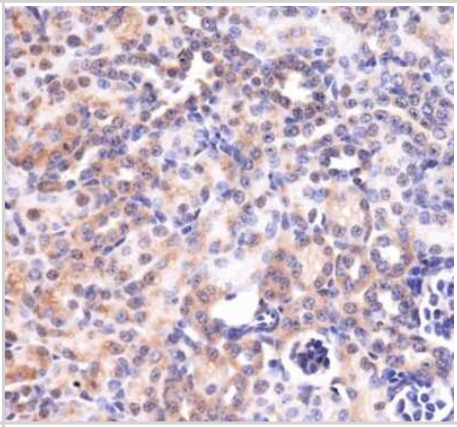
Western Blot: Mas Antibody [NBP1-78444] - Analysis of MAS1 in: (1) Ntera 2, (2) A431, (3) HepG2, (4) MCF7, (5) 3T3, and (6) Cos7.



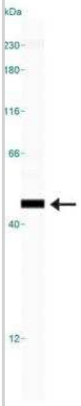
Immunocytochemistry/Immunofluorescence: Mas Antibody [NBP1-78444] - Tested at 1:25 in HepG2 cells with FITC (green). Nuclei were counterstained with DAPI (blue).



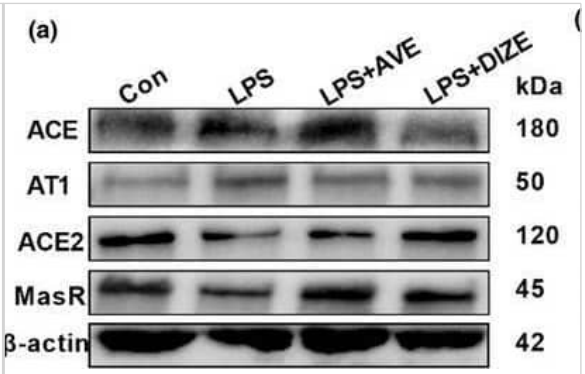
Immunohistochemistry: Mas Antibody [NBP1-78444] - Analysis of MAS1 in mouse kidney using DAB with hematoxylin counterstain.



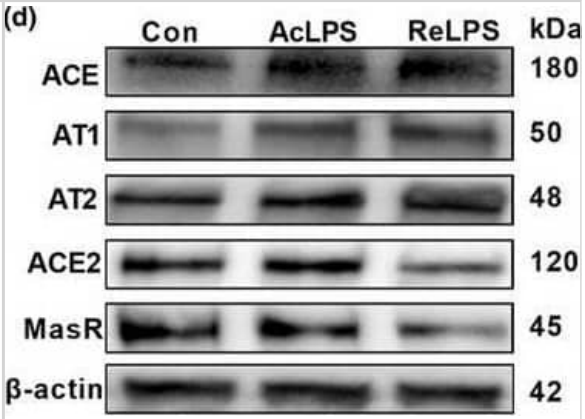
Simple Western: Mas Antibody [NBP1-78444] - Lane view shows a specific band for MAS1 in 0.5 mg/ml of HepG2 lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system.



MasR activation restores LPS□induced overactivation of ACE/AngII/AT1 axis and contains neuroprotective properties. (a–j) The impacts of MasR agonist, AVE, and the ACE2 activator, DIZE, on brain RAS following repeated LPS treatment. (a) Representative western blots. ACE protein expression (b) and activity (c). (d) AngII concentration. (e) AT1 protein expression. ACE2 protein expression (f) and activity (g). (h) Ang(1–7) concentration. MasR protein expression (i) and immunofluorescence staining (j). (m) Representative images of TUNEL and Nissl staining. (k, l) mRNA expression of biomarkers of microglial M1 phenotype (k) and M2 phenotype (l). Scale bar = 50 μm. Data are means +/- SD (n = 7). **p < 0.01 compared to control group. +p < 0.05, ++p < 0.01 compared to LPS group Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/34529881), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



LPS exposure shifts the balance of brain RAS. (a) The impacts of acute LPS (AcLPS) or repeated LPS (ReLPS) exposure on microglial activation (IBA□1 staining) and ROS generation (DHE staining) in the brain cortex of C57BL/6 mice. (b) Biomarkers of microglial M1 phenotype mRNA expression. (c) Biomarkers of microglial M2 phenotype mRNA expression. (d–m) Alterations of ACE/AngII/AT1 and ACE2/Ang(1–7)/MasR pathways following LPS treatment. (d) Representative western blots. ACE protein expression (e) and activity (f). (g) AngII concentration. (h) AT1 protein expression. (i) AT2 protein expression. ACE2 protein expression (j) and activity (k). (L) Ang(1–7) concentration. (m) MasR protein expression. Scale bar = 50 μm. Data are means +/- SD (n = 7–9). *p < 0.05, **p < 0.01 compared to control group Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/34529881), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Publications

Lamy GB, Cafarchio EM, do Vale B et al. Unveiling the Angiotensin-(1-7) Actions on the Urinary Bladder in Female Rats Frontiers in Physiology 2022-07-19 [PMID: 35928558] (Western Blot, Mouse)

Zhu C, Gu W, Sun D, Wei W The mechanism underlying fluoride-induced low-renin hypertension is related to an imbalance in the circulatory and local renin-angiotensin systems Toxicology letters 2023-04-25 [PMID: 37105417] (WB, Rat)

Juretzko A, Steinbach A, Witte J et al. Renal angiotensin I-converting enzyme-deficient mice are protected against aristolochic acid nephropathy Pflugers Archiv : European journal of physiology 2022-12-15 [PMID: 36520238] (WB, Mouse)

Matsunobe M, Motohashi N, Aoki E et al. Caveolin-3 regulates the activity of Ca2+/calmodulin-dependent protein kinase II in C2C12 cells American journal of physiology. Cell physiology 2022-08-22 [PMID: 35993515]

Fan H, Wu K, Wu J LRW fails to reduce blood pressure in spontaneously hypertensive rats due to its low gastrointestinal stability and transepithelial permeability Food Bioscience 2022-08-01 (WB, Rat)

Le Nguyen B, Yoshihara T, Deminice R et al. Alterations in renin-angiotensin receptors are not responsible for exercise preconditioning of skeletal muscle fibers Sports Med Health Sci 2022-07-05 [PMID: 35784524]

Dang R, Yang M, Cui C et al. Activation of angiotensin-converting enzyme 2/angiotensin (1-7)/mas receptor axis triggers autophagy and suppresses microglia proinflammatory polarization via forkhead box class O1 signaling Aging cell 2021-09-16 [PMID: 34529881] (IHC-P, WB, Mouse)

Gao Q, Chen R, Wu L et al. Angiotensin-(1-7) reduces alpha -synuclein aggregation by enhancing autophagic activity in Parkinson's disease Neural regeneration research 2022-05-01 [PMID: 34558543] (WB, Rat)

Lamy Gb, Cafarchio Em, Do Vale B Et Al. Lateral Preoptic Area Neurons Activated by Angiotensin-(1-7) Increase Intravesical Pressure: A Novel Feature in Central Micturition Control Frontiers in physiology 2021-07-12 [PMID: 34322035]

Yoshihara T, Deminice R, Hyatt H et al. Angiotensin 1-7 protects against ventilator-induced diaphragm dysfunction Clinical and translational science 2021-03-20 [PMID: 33742769] (WB, Rat)

Fan H, Bhullar K, Wu J Spent Hen Muscle Protein-Derived RAS Regulating Peptides Show Antioxidant Activity in Vascular Cells Antioxidants 2021-02-15 [PMID: 33671990] (WB, Human, Rat)

Dang Z, Su S, Jin G, et al. Tsantan Sumtang attenuated chronic hypoxia-induced right ventricular structure remodeling and fibrosis by equilibrating local ACE-AngII-AT1R/ACE2-Ang1-7-Mas axis in rat J Ethnopharmacol 2019-12-17 [PMID: 31862407] (IF/IHC, Rat)

More publications at http://www.novusbio.com/NBP1-78444

Procedures

Western Blot protocol for MAS1 Antibody (NBP1-78444)

Western Blot Protocol

1. Perform SDS-PAGE on samples to be analyzed, loading 40 ug of total protein per lane.
2. Transfer proteins to membrane according to the instructions provided by the manufacturer of the membrane and transfer apparatus.
3. Stain according to standard Ponceau S procedure (or similar product) to assess transfer success, and mark molecular weight standards where appropriate.
4. Rinse the blot.
5. Block the membrane using standard blocking buffer for at least 1 hour.
6. Wash the membrane in wash buffer three times for 10 minutes each.
7. Dilute primary antibody in blocking buffer and incubate 1 hour at room temperature.
8. Wash the membrane in wash buffer three times for 10 minutes each.
9. Apply the diluted HRP conjugated secondary antibody in blocking buffer (as per manufacturers instructions) and incubate 1 hour at room temperature.
10. Wash the blot in wash buffer three times for 10 minutes each (this step can be repeated as required to reduce background).
11. Apply the detection reagent of choice in accordance with the manufacturers instructions.

Note: Tween-20 can be added to the blocking or antibody dilution buffer at a final concentration of 0.05-0.2%.

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

Immunohistochemistry-Paraffin protocol for MAS1 Antibody (NBP1-78444)

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.

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Immunocytochemistry/Immunofluorescence Protocol for MAS1 Antibody (NBP1-78444)

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.

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Products Related to NBP1-78444

NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

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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