Product Datasheet

Mas Antibody - BSA Free
NLS1531

Unit Size: 0.05 ml

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

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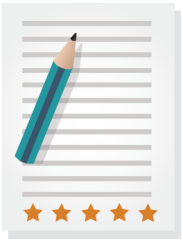
Updated 10/23/2024 v.20.1



NLS1531

Mas Antibody - BSA Free

Product Information

Unit Size	0.05 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	0.01% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS (pH 7.7)

Product Description

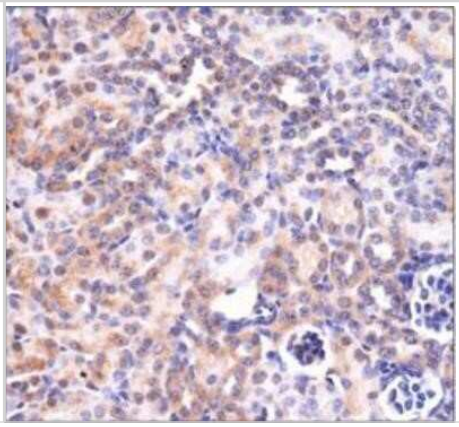
Host	Rabbit
Gene ID	4142
Gene Symbol	MAS1
Species	Human, Mouse, Rat
Immunogen	KLH conjugated synthetic peptide made to the C-terminus of human MAS1. [UniProt# P04201]

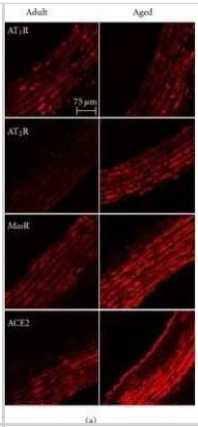
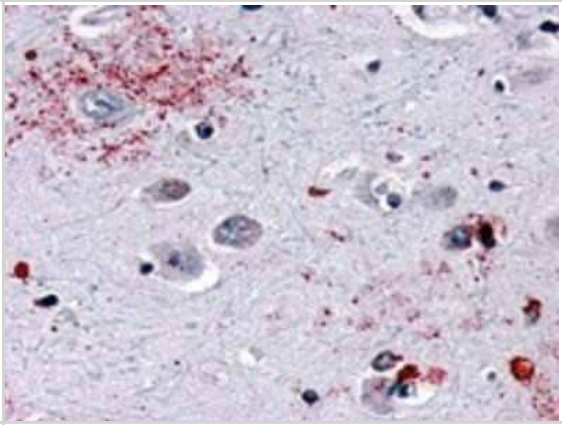
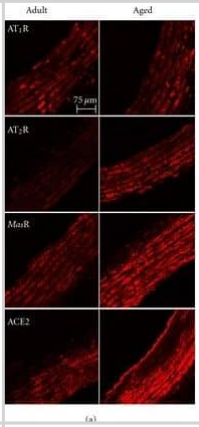
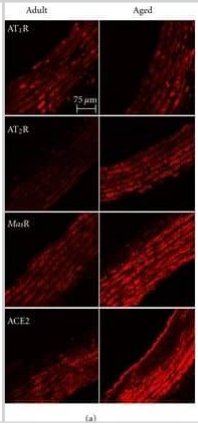
Product Application Details

Applications	Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin
Recommended Dilutions	Flow Cytometry reported in scientific literature (PMID 26386115), Immunohistochemistry 1:100-1:500, Immunocytochemistry/ Immunofluorescence 1:10-1:500. Use reported in scientific literature (PMID 22187625), Immunohistochemistry-Paraffin 1:100-1:500. Use reported in scientific literature (PMID 22187625), Immunohistochemistry-Frozen 1:100-1:500
Application Notes	Prior to immunostaining paraffin tissues, antigen retrieval with sodium citrate buffer (pH 6.0) is recommended.

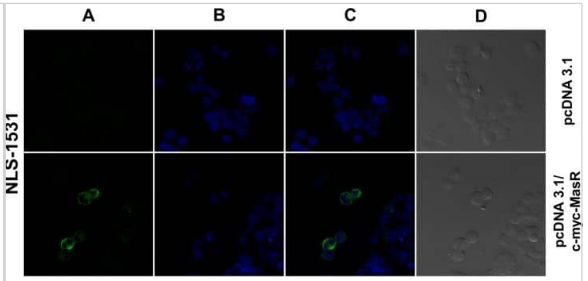
Images

Immunohistochemistry: Mas Antibody [NLS1531] - Analysis of MAS1 in mouse kidney using DAB with hematoxylin counterstain.

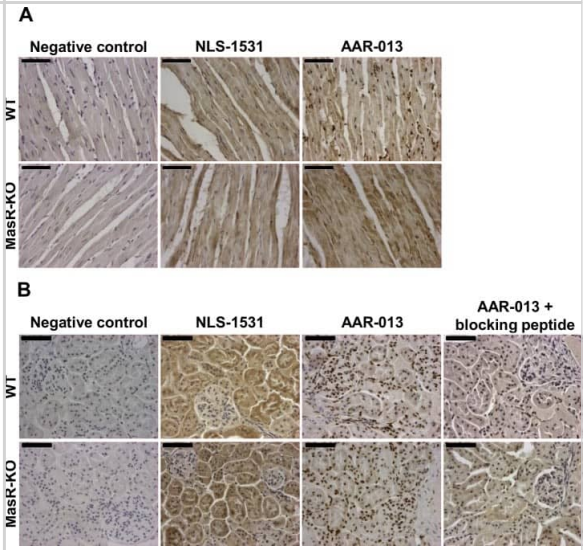


Immunohistochemistry-Paraffin: Mas Antibody [NLS1531] - Representative immunolocalisation images of AT1R, AT2R, MasR, and ACE2 in adult WKY rats and aged WKY rats. Mean data for aortic expression of the AT1R expressed as relative fluorescent units in adult (n = 5) and aged (n = 4) WKY rats. ***P < 0.001 versus adult WKY rats. Image collected and cropped by CiteAb from the following publication (https://www.hindawi.com/journals/ijht/2012/192567/), licensed under a CC-BY license.	
Immunohistochemistry-Paraffin: Mas Antibody [NLS1531] - Analaysis of Brain, Neurons and Glia using NLS1531 at 15 ug/ ml.	
(a) Representative immunolocalisation images of AT1R, AT2R, MasR, and ACE2 in adult WKY rats and aged WKY rats. Mean data for aortic expression of the (b) AT1R, (c) AT2R, (d) MasR, and (e) ACE2 expressed as relative fluorescent units in adult (n = 5) and aged (n = 4) WKY rats. ***P < 0.001 versus adult WKY rats.	
Immunocytochemistry/ Immunofluorescence: Mas Antibody - BSA Free [NLS1531] - (a) Representative immunolocalisation images of AT1R, AT2R, MasR, & ACE2 in adult WKY rats & aged WKY rats. Mean data for aortic expression of the (b) AT1R, (c) AT2R, (d) MasR, & (e) ACE2 expressed as relative fluorescent units in adult (n = 5) & aged (n = 4) WKY rats. ***P < 0.001 versus adult WKY rats. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/22187625), licensed under a CC-BY license. Not internally tested by Novus Biologicals.	

Immunocytochemistry/ Immunofluorescence: Mas Antibody - BSA Free [NLS1531] - Immunofluorescence studies in HEK293T cells overexpressing c-myc tagged MasR using MasR antibodies.Images of fluorescence signal corresponding to secondary cyanine (Cy3)-conjugated antibody (A), nuclear Hoechst 33258 staining (B), merged images (C) & bright field (D) are shown. In cells transfected with the pcDNA 3.1/c-myc-MasR construct, antibodies NLS-1531 & sc-54682 generated a similar staining pattern to that generated with the anti c-myc antibody. No staining was observed with any of these antibodies in cells transfected with the empty vector pcDNA 3.1. Antibody sc-135063 was capable of staining the plasma membrane of cells overexpressing the MasR but also generated widespread signals in cells transfected with the empty vector. For antibody AAR-013 there was no staining associated with the cell membrane. Intense immunocytochemical staining of identical distribution & intensity was revealed in cells transfected with the empty vector & those transfected with the c-myc-MasR construct. Images are representative of 3 independent experiments. Image collected & cropped by CiteAb from the following publication (https://dx.plos.org/10.1371/journal.pone.0183278), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Immunohistochemistry: Mas Antibody - BSA Free [NLS1531] - Immunohistochemistry in heart & kidney from wild-type (WT) & MasR-KO mice.Negative controls performed by omitting the primary antibody demonstrated minimal background immunostaining in heart (A) & kidney (B) sections. (A) In heart sections, NLS-1531 antibody stained predominantly the cytoplasm of cardiomyocytes with similar intensity in WT & MasR-KO hearts. The AAR-013 antibody stained the cardiomyocytes nucleus & weaker staining was observed in their cytoplasm. The same pattern was found in heart sections of MasR-KO mice. (B) In kidney sections, for NLS-1531 antibody, staining was mostly restricted to cytoplasm of numerous tubules cells with similar intensity in WT & MasR-KO kidneys. Antibody AAR-013 stained most intensely tubules cells nucleus & weaker staining was observed in their cytoplasm. Glomeruli were also stained positively. The same pattern was found in kidney sections of MasR-KO. Preincubation of the AAR-013 antibody with the blocking peptide provided by the vendors eliminated the immunohistochemical nuclear staining both in WT & MasR-KO mice kidney sections. Images are representative of n = 3. Bar, 50 µm. Image collected & cropped by CiteAb from the following publication (https://dx.plos.org/10.1371/journal.pone.0183278), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Publications

Burghi V, Fernandez NC, Gandola YB et al. Validation of commercial Mas receptor antibodies for utilization in Western Blotting, immunofluorescence and immunohistochemistry studies PLoS ONE 2017-08-16 [PMID: 28813513] (ICC/IF, Human)

Singh N, Joshi S, Guo L et al. ACE2/Ang-(1-7)/Mas Axis Stimulates Vascular-Repair Relevant Functions of CD34+ Cells. Am. J. Physiol. Heart Circ. Physiol. 2015-09-18 [PMID: 26386115] (FLOW, Human)

Jarajapu YP, Bhatwadekar AD, Caballero S et al. Activation of the ACE2/Angiotensin-(1-7)/Mas Receptor Axis Enhances the Reparative Function of Dysfunctional Diabetic Endothelial Progenitors Diabetes 2013-04-01 [PMID: 23230080]

Bosnyak S, Widdop RE, Denton KM, Jones ES. Differential Mechanisms of Ang (1-7)-Mediated Vasodepressor Effect in Adult and Aged Candesartan-Treated Rats. International Journal of Hypertension 20122012:1-9. [PMID: 22187625]

Procedures

Protocol specific for MAS1 Antibody (NLS1531)
Mas Antibody:
Immunohistochemistry

1. Prepare tissue with formalin fixation and by embedding it in paraffin wax.
2. Make 4-um sections and place on pre-cleaned and charged microscope slides.
3. Heat in a tissue-drying oven for 45 minutes at 60 degrees Celcius.
4. Deparaffinize the tissues by wash drying the slides in 3 changes of xylene approximately 5 minutes each @ RT.
5. Rehydrate the tissues by washing the slides in 3 changes of 100% alcohol approximately 3 minutes each @ RT.
6. Wash the slides in 2 changes of 95% alcohol approximately 3 minutes each @ RT.
7. Wash the slides in 1 change of 80% alcohol approximately 3 minutes @ RT.
8. Rinse the slides in gentle running distilled water approximately 5 minutes @ RT.
9. Perform antigen retrieval by steaming the slides in 0.01M sodium citrate buffer (pH 6.0) @ 99-100 degrees Celcius for 20 minutes.
10. Remove the slides from the heat and let stand in buffer @ RT for 20 minutes.
11. Rinse the slides in 1X TBS-T for 1 minute @ RT.

Do not allow the tissues to dry at any time during the staining procedure

12. Begin the immunostaining by applying a universal protein block approximately 20 minutes @ RT.
13. Drain protein block from the slides and apply the diluted primary antibody approximately 45 minutes @ RT.
14. Rinse the slide in 1X TBS-T approximately 1 minute @ RT.
15. Apply a biotinylated anti-rabbit IgG (H+L) secondary approximately 30 minutes @ RT.
16. Rinse the slide in 1X TBS-T approximately 1 minute at RT.
17. Apply an alkaline phosphatase steptavidin approximately 30 minutes at RT.
18. Rinse the slide in 1X TBS-T approximately 1 minute at RT.
19. Apply an alkaline phosphatase chromagen substrate approximately 30 minutes at RT.
20. Rinse the slide in distilled water approximately 1 minute @ RT.

This method should only be used if the chromagen substrate is alcohol insoluble (ie: Vector Red, DAB)

21. Dehydrate the tissue by washing the slides in 2 changes of 80% alcohol approximately 1 minute each @ RT.
22. Wash the slides in 2 changes of 95% alcohol approximately 1 minute each @ RT.
23. Wash the slides in 3 changes of 100% alcohol approximately 1 minute each @ RT.
24. Wash the slides in 3 changes of xyleneapproximately 1 minute each @ RT.
25. Apply cover slip.

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Products Related to NLS1531

NLS1531PEP-0.1mg	Mas Antibody Blocking Peptide
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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