abcam

Product datasheet

Anti-Natriuretic peptides A antibody [EPR22089-283] ab225844

Recombinant RabMAb

4 References 8 Images

Overview

Product name	Anti-Natriuretic peptides A antibody [EPR22089-283]
Description	Rabbit monoclonal [EPR22089-283] to Natriuretic peptides A
Host species	Rabbit
Tested applications	**Suitable for:** IHC-Fr, IHC-P, IP, WB
Species reactivity	**Reacts with:** Mouse, Rat
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Mouse and rat heart tissue lysate. IHC-P: Mouse heart and heart atrium tissues; Rat heart atrium tissue. IHC-Fr: Mouse and rat heart tissues. IP: Mouse heart tissue lysate.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information see here. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR22089-283

Isotype	IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab225844 in the following tested applications.

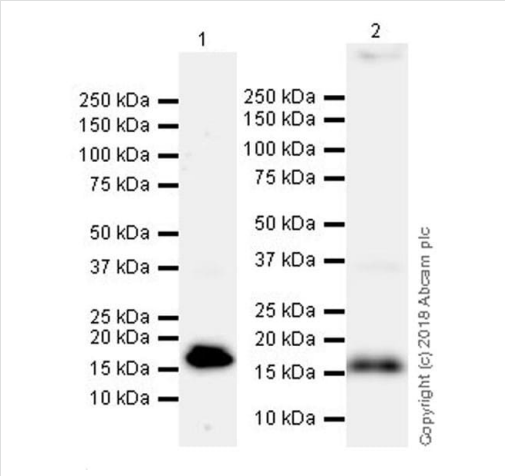
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-Fr		1/100. Perform heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).
IHC-P		1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
IP		1/30.
WB		1/1000. Detects a band of approximately 17 kDa (predicted molecular weight: 16 kDa).

Target

Function	Hormone playing a key role in cardiovascular homeostasis through regulation of natriuresis, diuresis, and vasodilation. Also plays a role in female pregnancy by promoting trophoblast invasion and spiral artery remodeling in uterus. Specifically binds and stimulates the cGMP production of the NPR1 receptor. Binds the clearance receptor NPR3.
Involvement in disease	Atrial standstill 2 Atrial fibrillation, familial, 6
Sequence similarities	Belongs to the natriuretic peptide family.
Post-translational modifications	Cleaved by CORIN upon secretion to produce the functional hormone. Atrial natriuretic factor: Cleaved by MME. The cleavage initiates degradation of the factor and thereby regulate its activity.
Cellular localization	Secreted.

Images



Western blot - Anti-Natriuretic peptides A antibody [EPR22089-283] (ab225844)

All lanes : Anti-Natriuretic peptides A antibody [EPR22089-283] (ab225844) at 1/1000 dilution

Lane 1 : Mouse heart tissue lysate
Lane 2 : Rat heart tissue lysate

Lysates/proteins at 10 µg per lane.

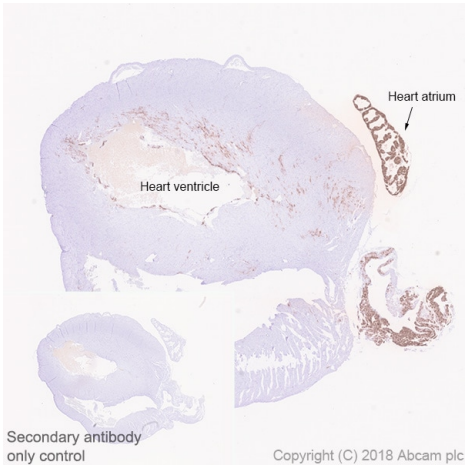
Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 16 kDa
Observed band size: 17 kDa

Exposure time : Lane 1: 3 minutes; Lane 2: 8 seconds.

Blocking/Dilution buffer: 5% NFDM/TBST.

The molecular mass observed is consistent with what has been described in the literature (PMID: 16291870).

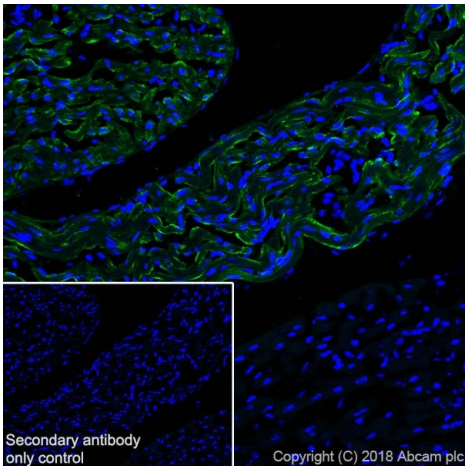


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Natriuretic peptides A antibody [EPR22089-283] (ab225844)

Immunohistochemical analysis of paraffin-embedded mouse heart tissue labeling Natriuretic peptides A with ab225844 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Strong cytoplasmic staining mainly in the atria and at lower levels in ventricle of mouse heart (PMID: 2942710; PMID:25532015; PMID: 1824903). Counterstained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

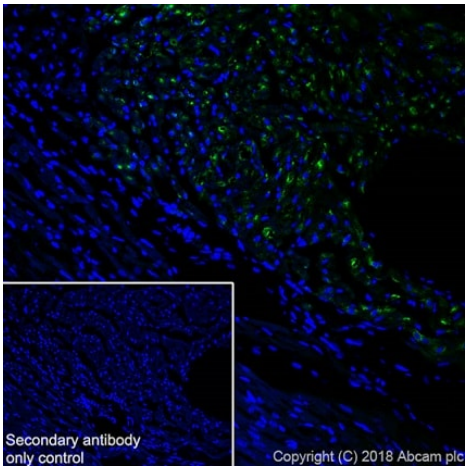


Immunohistochemistry (Frozen sections) - Anti-Natriuretic peptides A antibody [EPR22089-283] (ab225844)

Immunohistochemical analysis of 4% paraformaldehyde-fixed, 0.2% Triton X-100 permeabilized frozen mouse heart tissue labeling Natriuretic peptides A with ab225844 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green). Cytoplasmic staining in cardiac muscle of mouse atrium is observed.

The nuclear counter stain is DAPI (blue).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution.

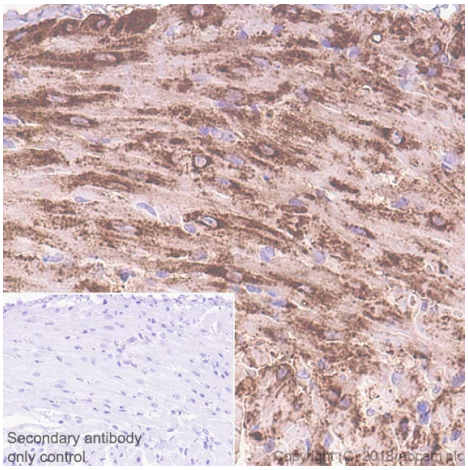


Immunohistochemistry (Frozen sections) - Anti-Natriuretic peptides A antibody [EPR22089-283] (ab225844)

Immunohistochemical analysis of 4% paraformaldehyde-fixed, 0.2% Triton X-100 permeabilized frozen rat heart tissue labeling Natriuretic peptides A with ab225844 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green). Cytoplasmic staining in cardiac muscle of rat atrium is observed.

The nuclear counter stain is DAPI (blue).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution.

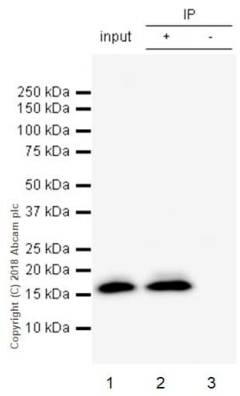


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Natriuretic peptides A antibody [EPR22089-283] (ab225844)

Immunohistochemical analysis of paraffin-embedded mouse heart atrium tissue labeling Natriuretic peptides A with ab225844 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Cytoplasmic staining in cardiac muscle of mouse atrium (PMID: 2942710; PMID:25532015; PMID: 1824903). Counterstained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

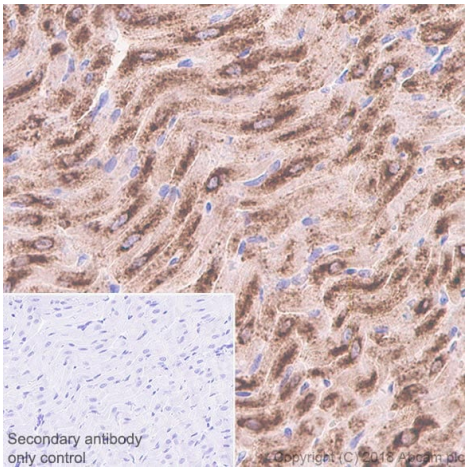


Immunoprecipitation - Anti-Natriuretic peptides A antibody [EPR22089-283] (ab225844)

Natriuretic peptides A was immunoprecipitated from 0.35 mg Mouse heart tissue lysate with ab225844 at 1/1000 dilution. Western blot was perfromed from the immunoprecipitate using ab225844 at 1/500 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366) was used for detection at 1/1000 dilution.

Lane 1: Mouse heart lysate 10 µg (Input).
Lane 2: ab225844 IP in Mouse heart tissue lysate (+).
Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab225844 in Mouse heart lysate (-).

Blocking and dilution buffer and concentration: 5% NFDM/TBST
Exposure time: 10 seconds



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Natriuretic peptides A antibody [EPR22089-283] (ab225844)

Immunohistochemical analysis of paraffin-embedded rat heart atrium tissue labeling Natriuretic peptides A with ab225844 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Cytoplasmic staining in cardiac muscle of rat atrium (PMID: 2942710; PMID:25532015; PMID: 1824903). Counterstained with Hematoxylin.

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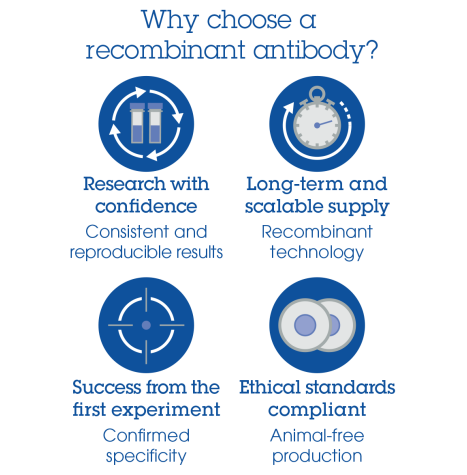

Anti-Natriuretic peptides A antibody [EPR22089-283] (ab225844)

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