

Product datasheet

Anti-Oxytocin antibody [EPR20973] ab212193

Recombinant RabMAb

★★★★☆ 1 Abreviews 6 References 6 Images

Overview

Product name	Anti-Oxytocin antibody [EPR20973]
Description	Rabbit monoclonal [EPR20973] to Oxytocin-neurophysin 1
Host species	Rabbit
Specificity	Specific expression in pituitary tissue in WB and posterior lobe in IHC.
Tested applications	Suitable for: WB, IHC-P, IHC-Fr
Species reactivity	Reacts with: Mouse, Rat
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Mouse and rat pituitary tissue lysates. IHC-P: Mouse and rat hypothalamus tissues. IHC-Fr: Mouse and rat brain (Paraventricular nucleus) tissues.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

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: 0.05% BSA, 40% Glycerol, PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR20973

Isotype

IgG

Applications

The Abpromise guarantee

Our [Abpromise guarantee](#) covers the use of ab212193 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
WB		1/1000. Detects a band of approximately 12 kDa (predicted molecular weight: 12 kDa).
IHC-P		1/8000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
IHC-Fr		1/500. Perform heat mediated antigen retrieval with sodium citrate buffer pH 6.0 before commencing with IHC staining protocol.

Target

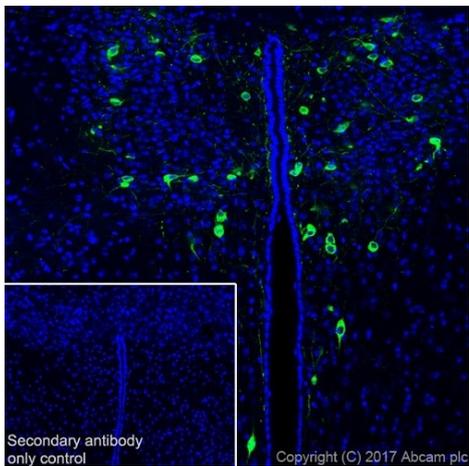
Relevance

Neurophysin 1 specifically binds oxytocin. Oxytocin causes contraction of the smooth muscle of the uterus and of the mammary gland. Oxytocin is a posterior pituitary hormone which is synthesized as an inactive precursor in the hypothalamus along with its carrier protein neurophysin I. Together with neurophysin, it is packaged into neurosecretory vesicles and transported axonally to the nerve endings in the neurohypophysis, where it is either stored or secreted into the bloodstream. Oxytocin contracts smooth muscle during parturition and lactation. It is also involved in cognition, tolerance, adaptation and complex sexual and maternal behaviour, as well as in the regulation of water excretion and cardiovascular functions.

Cellular localization

Secreted

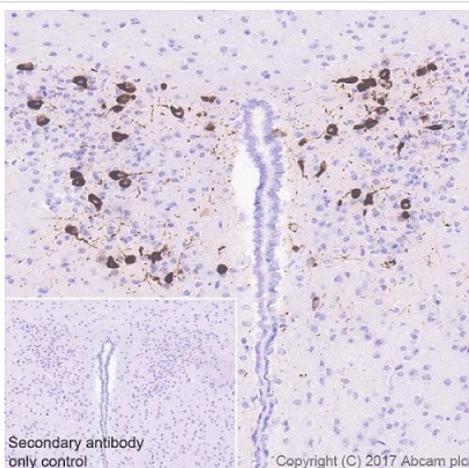
Images



Immunohistochemistry (Frozen sections) - Anti-Oxytocin-neurophysin 1 antibody [EPR20973] (ab212193)

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized mouse brain (paraventricular nucleus) tissue labeling Oxytocin-neurophysin 1 with ab212193 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) at 1/1000 dilution (green). Cytoplasmic staining on neurons located at the paraventricular nucleus (PVN) on mouse brain tissue section (PMID:24464043). The nuclear counterstain 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) at 1/1000 dilution.

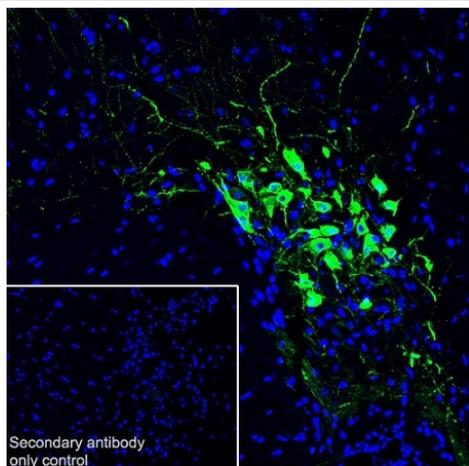


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Oxytocin-neurophysin 1 antibody [EPR20973] (ab212193)

Immunohistochemical analysis of paraffin-embedded mouse hypothalamus tissue labeling Oxytocin-neurophysin 1 with ab212193 at 1/8000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Cytoplasmic staining on the neurons of mouse paraventricular nucleus (PMID: 24464043). Counter stained 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.

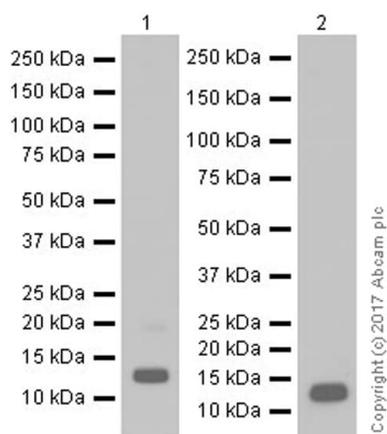
Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Frozen sections) - Anti-Oxytocin-neurophysin 1 antibody [EPR20973] (ab212193)

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized rat brain (paraventricular nucleus) tissue labeling Oxytocin-neurophysin 1 with ab212193 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) at 1/1000 dilution (green). Cytoplasmic staining on neurons located at the paraventricular nucleus (PVN) on rat brain tissue section (PMID:24464043). The nuclear counterstain 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) at 1/1000 dilution.



Western blot - Anti-Oxytocin-neurophysin 1 antibody [EPR20973] (ab212193)

All lanes : Anti-Oxytocin antibody [EPR20973] (ab212193) at 1/1000 dilution

Lane 1 : Mouse pituitary tissue lysate

Lane 2 : Rat pituitary tissue lysate

Lysates/proteins at 10 µg per lane.

Secondary

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

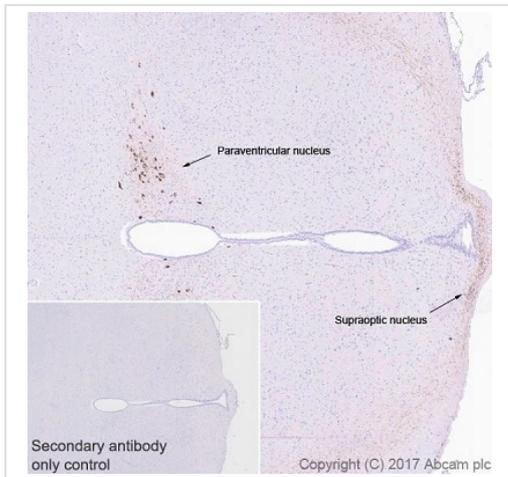
Developed using the ECL technique.

Predicted band size: 12 kDa

Observed band size: 12 kDa

Exposure times: Lane 1: 3 seconds; Lane 2: 1 second.

Blocking/Dilution buffer: 5% NFDm/TBST.



Immunohistochemical analysis of paraffin-embedded rat hypothalamus tissue labeling Oxytocin-neurophysin 1 with ab212193 at 1/8000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Cytoplasmic staining on the neurons of rat paraventricular nucleus and supraoptic nucleus (PMID: 24464043). Counter stained 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.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Oxytocin-neurophysin 1 antibody [EPR20973] (ab212193)

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-Oxytocin-neurophysin 1 antibody [EPR20973] (ab212193)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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