

Anti-Oxytocin-neurophysin 1 antibody [EPR20973] - BSA and Azide free ab226490

Recombinant RabMAb

5 Images

Overview

Product name	Anti-Oxytocin-neurophysin 1 antibody [EPR20973] - BSA and Azide free
Description	Rabbit monoclonal [EPR20973] to Oxytocin-neurophysin 1 - BSA and Azide free
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	IHC-P: Mouse hypothalamus tissue.
General notes	ab226490 is the carrier-free version of ab212193 .

Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

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. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR20973
Isotype	IgG

Applications

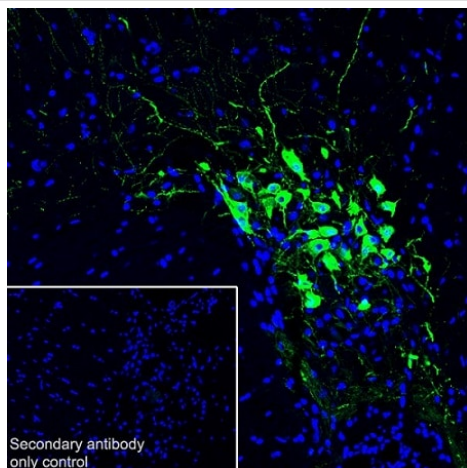
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab226490 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Detects a band of approximately 12 kDa (predicted molecular weight: 12 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
IHC-Fr		Use at an assay dependent concentration. 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

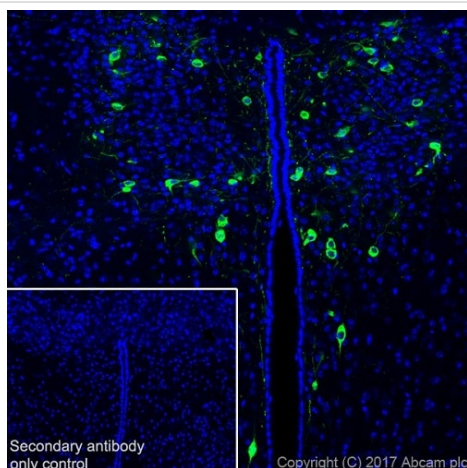


Immunohistochemistry (Frozen sections) - Anti-Oxytocin-neurophysin 1 antibody [EPR20973] - BSA and Azide free (ab226490)

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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab212193**).

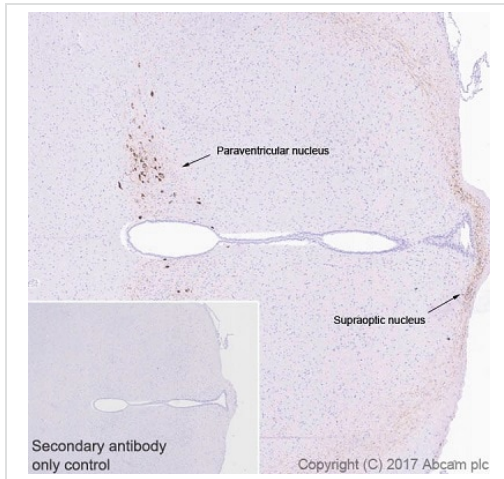


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Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Oxytocin-neurophysin 1 antibody [EPR20973] - BSA and Azide free (ab226490)

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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab212193**).

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] - BSA and Azide free (ab226490)

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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab212193**).

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

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

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

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