

Datasheet for 600-401-DM4**PHOX2A Antibody****Overview**

Description:	Anti-PHOX2A (RABBIT) Antibody - 600-401-DM4
Item No.:	600-401-DM4
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	PHOX2A and PHOX2B (Paired mesoderm homeobox protein) are closely related, paired-homeodomain transcription factors that function as determinants of the noradrenergic phenotype during embryogenesis. PHOX2 proteins are crucial for the regulation of endogenous hydroxylases in neural crest cells and promote sympathetic neuron generation. Human PHOX2B contains one DNA binding homeobox domain and is required for the differentiation of all central and nonperipheral noradrenergic centers in the brain. In contrast, PHOX2A controls only the differentiation of the main noradrenergic center of the brain. Regulation of PHOX2 may have therapeutic utility in aging or disorders involving degeneration of noradrenergic neurons.
Synonyms:	PHOX2A Antibody, ARIX, FEOM2, NCAM2, PMX2A, CFEOM2, ARIX, Paired mesoderm homeobox protein 2A, ARIX1 homeodomain protein
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	PHOX2A
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-PHOX2A antibody was prepared from whole rabbit serum produced by repeated immunizations with a 16 amino acid synthetic peptide near the C-terminus of human PHOX2A.

Purity/Specificity: Anti-PHOX2A Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. PHOX2A antibody is predicted to not cross-react with other paired homeobox family members.

Relevant Links:

- [UniProtKB - O14813](#)
- [GeneID - 401](#)
- [NCBI - NP_005160](#)

Application Details

Tested Applications: ELISA, IF, IHC, WB

Application Note: Anti-PHOX2A Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 29 kDa in Western Blots of specific cell lysates and tissues.

Assay Dilutions: All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

ELISA: 1:10,000

IF: 2.5 µg/mL

IHC: 2.5 µg/mL

WB: 1 µg/mL

Formulation

Physical State: Liquid (sterile filtered)

Concentration: 1 mg/mL by UV absorbance at 280 nm

Buffer: 0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2

Preservative: 0.02% (w/v) Sodium Azide

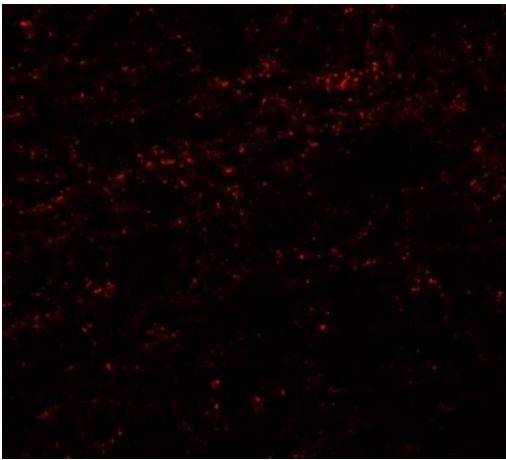
Stabilizer: None

Shipping & Handling

Shipping Condition: Dry Ice

Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images

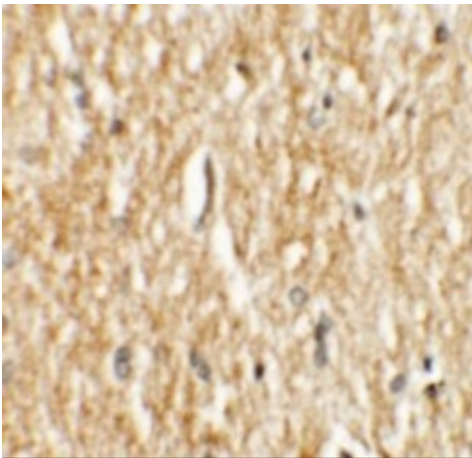


Immunofluorescence Microscopy

Immunofluorescence of PHOX2A.

Tissue: human brain tissue.

Primary Antibody: PHOX2A antibody at 20 µg/mL.

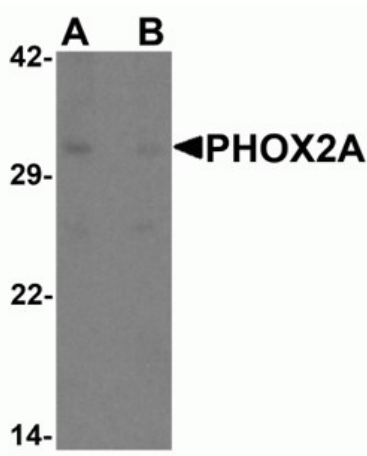


Immunohistochemistry

Immunohistochemistry of PHOX2A.

Tissue: human brain tissue.

Primary Antibody: PHOX2A antibody at 2.5 µg/mL.

**Western Blot**

Western blot analysis of PHOX2A.

Load: rat brain tissue lysate.

Primary Antibody: PHOX2A antibody at 1 $\mu\text{g/ml}$ in (A) the absence and (B) the presence of blocking peptide.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.