

Product datasheet

Anti-COX5A antibody [EPR14208(B)] ab180129

Recombinant RabMAb

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Overview

Product name	Anti-COX5A antibody [EPR14208(B)]
Description	Rabbit monoclonal [EPR14208(B)] to COX5A
Host species	Rabbit
Tested applications	Suitable for: IHC-P, WB, IP
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: HeLa cell lysate; human heart, mouse heart and brain, rat heart and brain tissue lysates. IHC-P: Human colon carcinoma, mouse kidney and rat stomach tissue. IP: Mouse heart tissue lysate.
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	Preservative: 0.01% Sodium azide Constituents: 59% PBS, 0.05% BSA, 40% Glycerol
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR14208(B)
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab180129 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-P		1/3000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. See <u>IHC antigen retrieval protocols</u> . The immunostaining was performed on a Leica Biosystems BOND® RX instrument.
WB		1/5000. Detects a band of approximately 13 kDa (predicted molecular weight: 17 kDa).
IP		1/80.

Target

Function

This is the heme A-containing chain of cytochrome c oxidase, the terminal oxidase in mitochondrial electron transport.

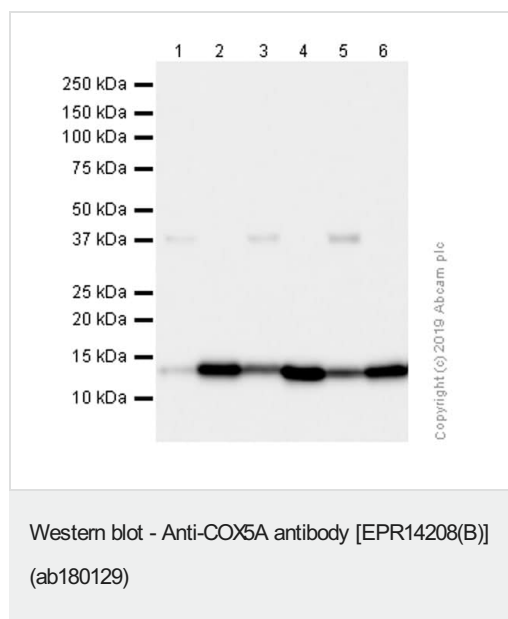
Sequence similarities

Belongs to the cytochrome c oxidase subunit 5A family.

Cellular localization

Mitochondrion inner membrane.

Images



All lanes : Anti-COX5A antibody [EPR14208(B)] (ab180129) at 1/5000 dilution (Purified)

Lane 1 : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

Lane 2 : Human heart lysates

Lane 3 : Mouse brain lysates

Lane 4 : Mouse heart lysates

Lane 5 : Rat brain lysates

Lane 6 : Rat heart lysates

Lysates/proteins at 20 µg per lane.

Secondary

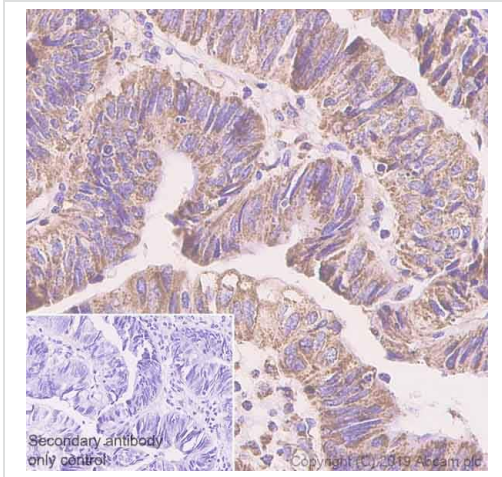
All lanes : Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Predicted band size: 17 kDa

Observed band size: 13 kDa

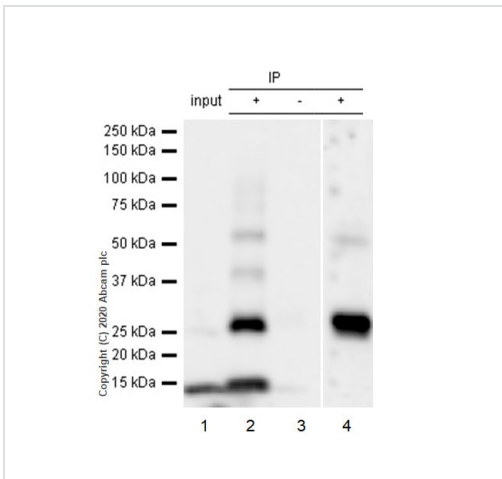
Blocking/Diluting buffer: 5% NFDm/TBST.

The molecular weight observed is consistent with what has been described in PMID: 28082314



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human colon carcinoma tissue sections labeling COX5A with purified ab180129 at 1/3000 dilution (0.5 µg/mL). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 1 (pH 6.0). Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-COX5A antibody [EPR14208(B)] (ab180129)



Immunoprecipitation - Anti-COX5A antibody [EPR14208(B)] (ab180129)

Purified ab180129 at 1/80 dilution (2µg) immunoprecipitating COX5A in Mouse heart lysate.

Lane 1 (input): Mouse heart lysate (10µg)

Lane 2 (+): ab180129 + Mouse heart lysate.

Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of ab180129 in Mouse heart lysate.

Lane 4: Mouse heart lysate captured by ab180129 and detected by anti-Ubiquitin antibody (**ab134953**).

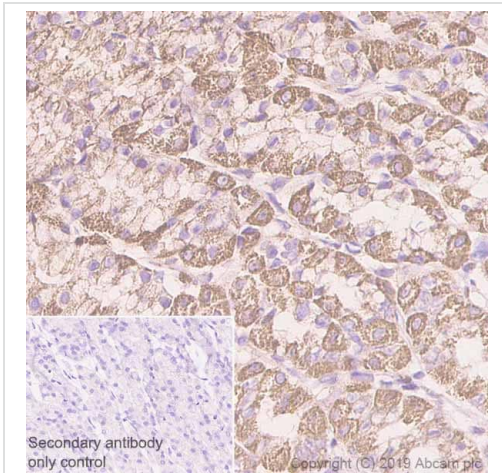
VeriBlot for IP Detection Reagent (HRP) (**ab131366**) (1/1000) was used for Western blotting.

Blocking Buffer and concentration: 5% NFDm/TBST.

Diluting buffer and concentration: 5% NFDm/TBST.

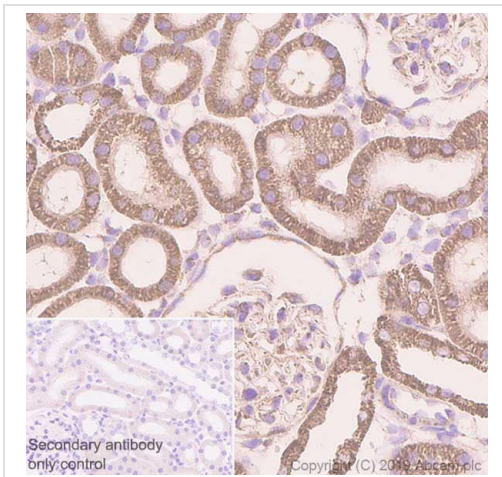
Observed band size: 13 kDa

The ladder band pattern could be ubiquitylated Cox5a as validated by anti-Ubiquitin antibody (**ab134953**, Lane4)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-COX5A antibody [EPR14208(B)] (ab180129)





Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat stomach tissue sections labeling COX5A with purified ab180129 at 1/3000 dilution (0.5 µg/mL). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 1 (pH 6.0). Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-COX5A antibody [EPR14208(B)] (ab180129)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse kidney tissue sections labeling COX5A with purified ab180129 at 1/3000 dilution (0.5 µg/mL). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 1 (pH 6.0). Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

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

Anti-COX5A antibody [EPR14208(B)] (ab180129)

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

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