

## COX IV Recombinant Rabbit Monoclonal Antibody Product Datasheet

Catalog# BX00080

Clone# RR684

**Predicted Molecular Wt:** 20kDa

**Purity:** ProA affinity purified IgG

**Species Cross-reactivity:** Hu, Mu, Rat, Dog, Bovine, Pig, Chicken, Green monkey

**Form:** Liquid

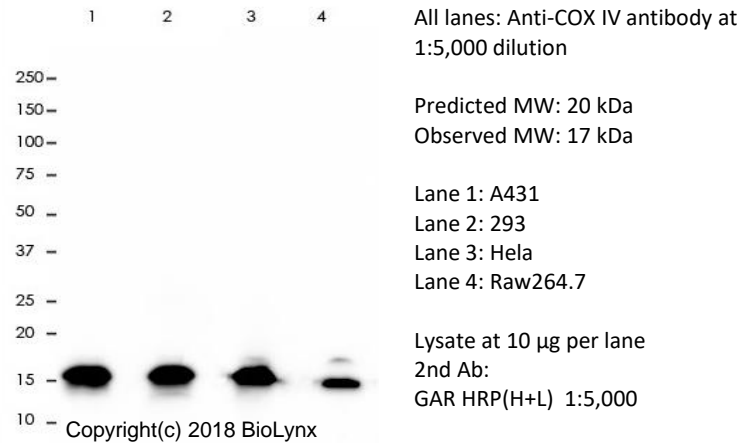
*Species cross-reactivity determined by WB*

**Swissprot ID:** P13073

**Applications:** WB IHC-P IF/ICC FC IP

### Background:

This protein is one of the nuclear-coded polypeptide chains of cytochrome c oxidase, the terminal oxidase in mitochondrial electron transport.



### Immunogen:

A synthetic peptide corresponding to residues on the N-terminus of human COX IV was used as an immunogen.

### Storage Buffer:

PBS 59%, Sodium azide 0.01%, Glycerol 40%, BSA 0.05%.

### Storage conditions:

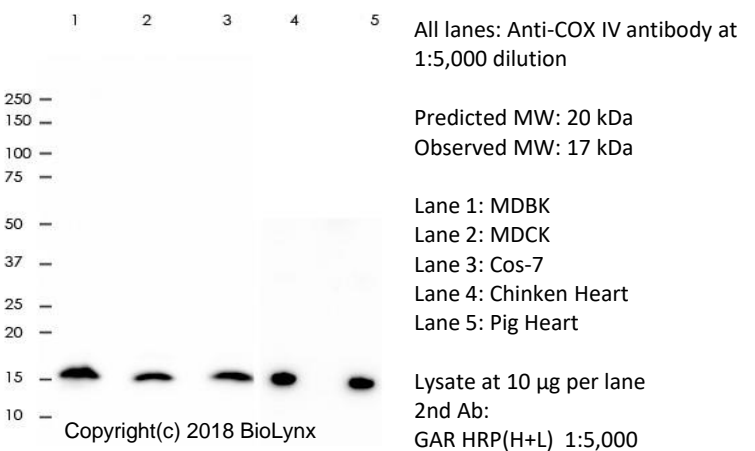
-20°C.

### Storage instructions:

Shipped on blue ice. Upon delivery, aliquot, and store at -20°C. Avoid freeze / thaw cycles.

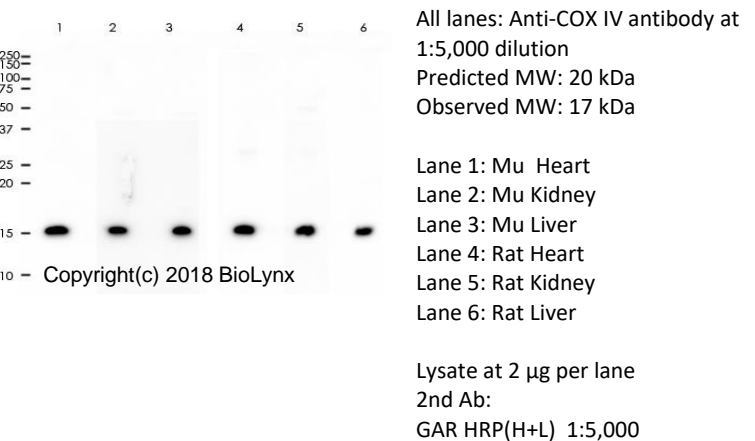
### Recommended Dilutions:

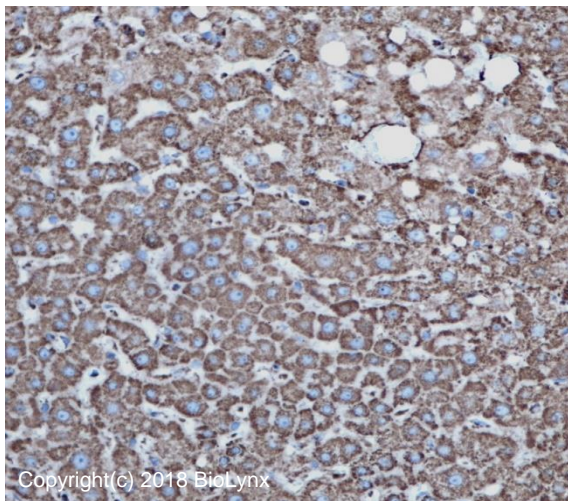
WB: 1:5,000 - 1:10,000  
 IHC-P: 1:200 - 1:400  
 IF/ICC: 1:10 - 1:50  
 FC: 1:200 - 1:1,000  
 IP: 1:50



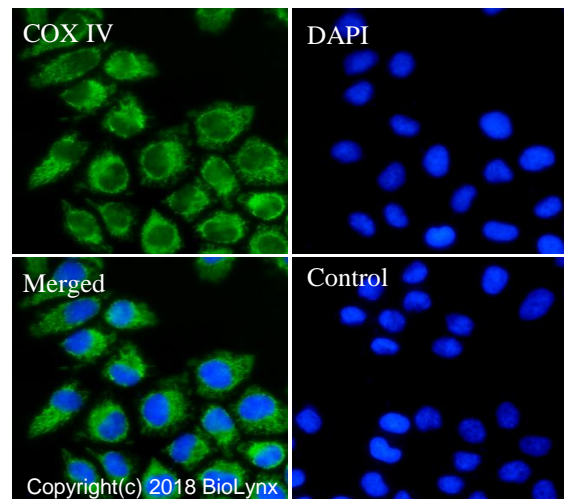
### Background References:

- Ivankovic D et al. J Neurochem 136:388-402 (2016).
- Phillips J et al. Sci Rep 6:26013 (2016).



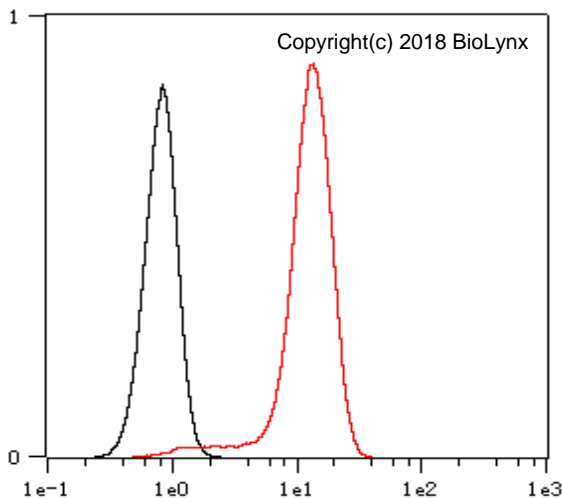


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of liver tissue labelling COX IV with RR684 at 1:200. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9.0.

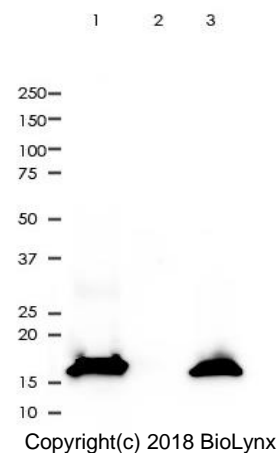


RR684 staining COX IV in HeLa cells by IF/ICC (immunofluorescence/immunocytochemistry). Cells were fixed with paraformaldehyde, permeabilized with 0.1% Triton X-100 and blocked with 10% goat serum for half an hour at room temperature. Samples were incubated with primary antibody (1:50) at 4°C. An Alexa Fluor® 488-conjugated Goat Anti-Rabbit IgG polyclonal was used as the secondary antibody (1:500). DAPI (blue) was used as the nuclear counter stain.

Control: PBS and secondary antibody, An Alexa Fluor® 488-conjugated Goat Anti-Rabbit IgG (1:500).



Overlay histogram showing HeLa cells stained with RR684 (Red). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% TritonX-100 for 15 min. The cells were then incubated in the antibody (RR684, 1:1,000 dilution) in 1x PBS/1% BSA for 30 min at room temperature. The secondary antibody used was a Goat Anti-Rabbit Alexa Fluor® 488 (IgG H+L) at 1:2,000 dilution for 20 min at room temperature. Unlabelled sample (Black) was used as a control.



COX IV was immunoprecipitated from 0.4mg of HeLa whole cell lysate with RR684 at 1:50 dilution.

2nd Ab:  
 GAR HRP for IP 1:500

Lane 1: RR684 IP in HeLa whole cell lysate  
 Lane 2: PBS instead of RR684 in HeLa whole cell lysate  
 Lane 3: HeLa whole cell lysate, 10 µg (input)

Exposure: 20s

Product QC'd by:



For research use only. Not for use in diagnostic or therapeutic applications.