

PRODUCT DATA SHEET

Bioworld Technology,Inc.

COX4-1 monoclonal antibody

Catalog: MB66484 Host: Mouse Reactivity: Human, Mouse, Rat, Hamster, Goat, Monkey

BackGround:

Cytochrome c oxidase (COX) is a hetero-oligomeric enzyme consisting of 13 subunits localized to the inner mitochondrial membrane. It is the terminal enzyme complex in the respiratory chain, catalyzing the reduction of molecular oxygen to water coupled to the translocation of protons across the mitochondrial inner membrane to drive ATP synthesis. The 3 largest subunits forming the catalytic core are encoded by mitochondrial DNA, while the other smaller subunits, including COX IV, are nuclear-encoded. Research studies have shown that deficiency in COX activity correlates with a number of human diseases. The COX IV antibody can be used effectively as a mitochondrial loading control in cell-based research assays.

Product:

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide, pH 7.3.

Molecular Weight:

~17 kDa

Swiss-Prot:

P13073

Purification&Purity:

The antibody was purified by immunogen affinity chromatography.

Applications:

WB (1/500 - 1/1000), IHC (1/50 - 1/100), IF/ICC (1/50 - 1/100), IP (1/10 - 1/50), FC (1/50 - 1/100)

Storage&Stability:

Store at $4 \,\mathrm{C}$ short term. Aliquot and store at $-20 \,\mathrm{C}$ long term. Avoid freeze-thaw cycles.

Specificity:

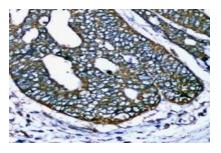
Recognizes endogenous levels of COX4-1 protein.

DATA:

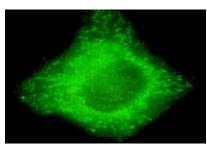
KDa A B C D E F

130
95
70
55
43
33
25

Western blot analysis of COX4-1 expression in CHOk1 (A), COS7 (B), NIH3T3 (C), Hela (D), C6 (E), mouse skeletal muscel (F) whole cell lysates.



Immunohistochemical analysis of COX4-1 staining in human colon cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.50). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of COX4-1 staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells

Bioworld Technology, Inc.

Add: 1660 South Highway 100, Suite 500 St. Louis Park,

MN 55416,USA.

Email: <u>info@bioworlde.com</u>

Tel: 6123263284 Fax: 6122933841

Bioworld technology, co. Ltd.

Add: No 9, weidi road Qixia District Nanjing, 210046,

P. R. China.

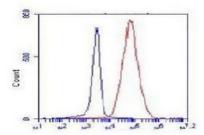
Email: <u>info@biogot.com</u>
Tel: 0086-025-68037686
Fax: 0086-025-68035151



PRODUCT DATA SHEET

Bioworld Technology,Inc.

were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark.



Note:

For research use only, not for use in diagnostic procedure.

Bioworld Technology, Inc.

Add: 1660 South Highway 100, Suite 500 St. Louis Park,

MN 55416,USA.

Email: <u>info@bioworlde.com</u>
Tel: 6123263284

Tel: 6123263284 Fax: 6122933841 Bioworld technology, co. Ltd.

Add: No 9, weidi road Qixia District Nanjing, 210046,

P. R. China.

Email: info@biogot.com
Tel: 0086-025-68037686
Fax: 0086-025-68035151