Rabbit Anti-Rat COX2 Polyclonal Antibody

**Cat. No.** DPAB1948RR

**Lot No.** (See product label)

**PRODUCT INFORMATION**

**Product Overview:** Rabbit anti-rat cytochrome c oxidase II polyclonal antibody is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded tissue sections, to be viewed by light microscopy. Clinical interpretation of staining results should be accompanied by histological studies with proper controls. Patients’ clinical histories and other relevant diagnostic tests should be utilized by a qualified person(s) when evaluating and interpreting results.

**Antigen Description:** Cytochrome c oxidase subunit II, also known as COX2, is a human protein and gene that belongs to cytochrome c oxidase subunit II protein family.

**Immunogen:** Recombinant protein corresponding to c-terminus of rat COX2.

**Cellular Localization:** Cytoplasmic, membrane

**Species:** Rat

**Host animal:** Rabbit

**Specificity:** This antibody reacts with a 70 kD protein. COX2 (Cyclooxygenase-2) is an inducible enzyme. It is involved in the response of cells to growth factors, tumor promoters and cytokines that induce its expression. COX2 expression markedly increased in 85-90% of human colorectal adenocarcinoma whereas COX1 levels remain unchanged. This antibody cross reacts with mouse and rat.

**Form:** Purified immunoglobulin fraction of rabbit antiserum containing sodium azide as a preservative.

**Applications:** Immunohistochemistry

**Titer/Working Dilution:** This antibody may be diluted to a titer of 1:50-1:100 in an ABC method. The final dilution should be determined by the user based upon the staining conditions employed.

**Staining Protocol:** We suggest an incubation period of 30 minutes at room temperature. Optimal incubation conditions should be determined by the user based upon the fixation conditions and staining system employed. Formalin fixed paraffin embedded tissue sections require high temperature antigen unmasking with 10 mM citrate buffer, pH 6.0 prior to immunostaining.

**Positive Control:** Lung and colon carcinoma.

**Storage:** Store at 2-8°C. Do not use beyond the expiration date stated on the label.

**REFERENCES**


**ANTIGEN GENE INFORMATION**

**Gene Name:** mt-Co2 cytochrome c oxidase II, mitochondrial [Rattus norvegicus]

**Official Symbol:** mt-Co2

**Synonyms:** mt-Co2; cytochrome c oxidase II, mitochondrial; COII; COX2; COXII; MTCO2; CO2; cytochrome c oxidase subunit 2; cytochrome c oxidase subunit II; mitochondrial encoded cytochrome c oxidase II; Cytochrome c oxidase polypeptide II; EC 1.9.3.1

**GeneID:** 26198

**UniProt ID:** Q8SEZ5

**Pathway:** Alzheimer's disease; Cardiac muscle contraction; Cytochrome c oxidase; Electron Transport Chain; Folic Acid Network; Huntington's disease; Metabolic pathways; Metabolism; Oxidative phosphorylation; Parkinson's disease; Respiratory electron transport, ATP synthesis by chemiosmotic coupling, and heat production by uncoupling proteins; The citric acid (TCA) cycle and respiratory electron transport; selenium Function: copper ion binding; cytochrome-c oxidase activity; electron carrier activity; heme binding; metal ion binding; molecular_function; oxidoreductase activity