

Basic Information

Product Name	Anti-COX-1/Cyclooxygenase-1/PTGS1 Antibody	
Gene Name	PTGS1	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, FCM	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human COX1 recombinant protein (Position: E318-L599). Human COX1 shares 90% and 89% amino acid (aa) sequence identity with mouse and ratCOX1, respectively.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	70 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Flow Cytometry (Fixed): 1:50-200 (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied.

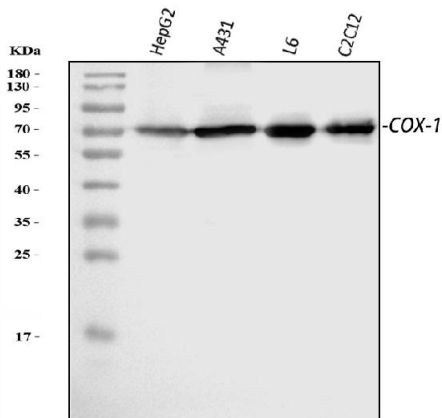
Background Information

Cyclooxygenase 1(COX1), also known as Prostaglandin-endoperoxide synthase (PTGS1) or mitochondrial cytochrome c oxidase subunit 1, is the key enzyme in prostaglandin biosynthesis. The gene was approximately 40 kb long, with 11 protein-coding exons. There were 599 amino acid residues with a calculated molecular mass of approximately 68 kD. By analysis of a human/hamster somatic hybrid DNA panel, it was demonstrated that the PTGS1 gene maps to chromosome 9. Human prostaglandin endoperoxide synthase exhibited 91% amino acid identity with the sheep enzyme. Prostaglandin synthase 1 gene disruption in mice reduces arachidonic acid-induced inflammation and indomethacin-induced gastric ulceration.

Reference

Anti-COX-1/Cyclooxygenase-1/PTGS1 Antibody被引用在8文献中。

Selected Validation Data



Western blot analysis of COX-1/Cyclooxygenase-1/PTGS1 using anti-COX-1/Cyclooxygenase-1/PTGS1 antibody (PB9002). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: HEPG2 whole cell lysates,

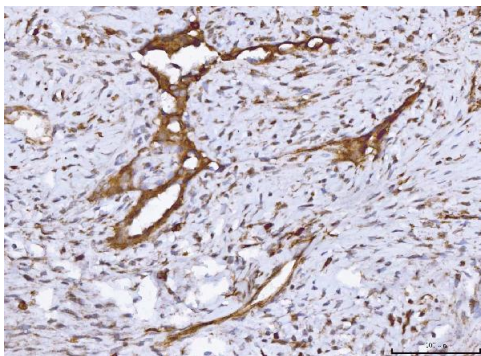
Lane 2: A431 whole cell lysates,

Lane 3: L6 whole cell lysates,

Lane 4: C2C12 whole cell lysates.

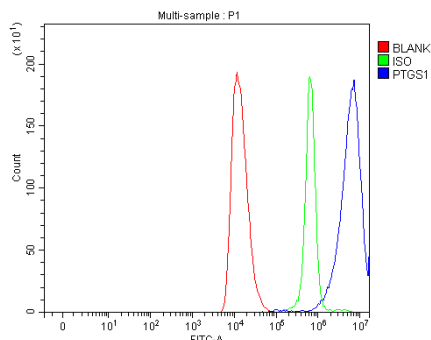
After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-

COX-1/Cyclooxygenase-1/PTGS1 antigen affinity purified polyclonal antibody (PB9002) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for COX-1/Cyclooxygenase-1/PTGS1 at approximately 70 kDa. The expected band size for COX-1/Cyclooxygenase-1/PTGS1 is at 69 kDa.



IHC analysis of COX-1/Cyclooxygenase-1/PTGS1 using anti-COX-1/Cyclooxygenase-1/PTGS1 antibody (PB9002).

COX-1/Cyclooxygenase-1/PTGS1 was detected in a paraffin-embedded section of human breast cancer tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-COX-1/Cyclooxygenase-1/PTGS1 Antibody (PB9002) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.



Flow Cytometry analysis of HEL cells using anti-

COX-1/Cyclooxygenase-1/PTGS1 antibody (PB9002).

Overlay histogram showing HEL cells stained with PB9002 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-COX-1/Cyclooxygenase-1/PTGS1 Antibody (PB9002) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.