

## Basic Information

<b>Product Name</b>	Anti-COX-1/Cyclooxygenase-1/PTGS1 Antibody	
<b>Gene Name</b>	PTGS1	
<b>Source</b>	Rabbit	
<b>Clonality</b>	Polyclonal	
<b>Isotype</b>	IgG	
<b>Species Reactivity</b>	human	
<b>Tested Application</b>	WB, IHC	
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
<b>Immunogen</b>	A synthetic peptide corresponding to a sequence at the N-terminus of human COX1, different from the related rat and mouse sequences by two amino acids.	
<b>Concentration</b>	500 ug/ml	
<b>Purification</b>	Immunogen affinity purified.	
<b>Observed MW</b>	70 kDa	
<b>Dilution Ratios</b>	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 (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.

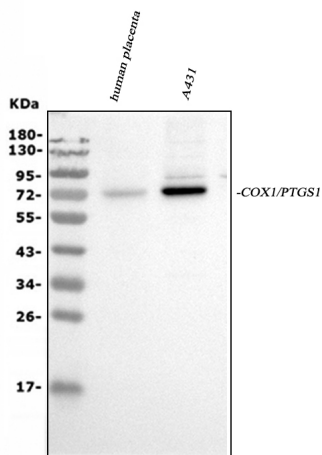
## Background Information

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, Funk et al.(1991) 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.

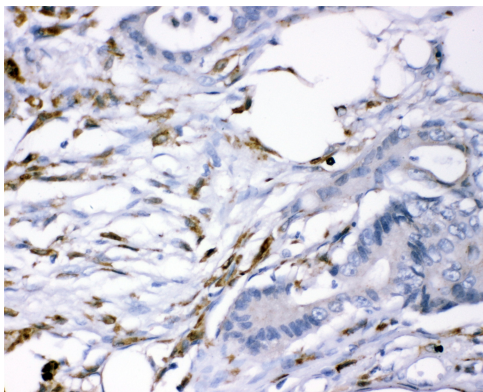
## Reference

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

## Selected Validation Data



Western blot analysis of COX-1/Cyclooxygenase-1/PTGS1 using anti-COX-1/Cyclooxygenase-1/PTGS1 antibody (BA0608). The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human placenta liver tissue lysates, Lane 2: A431 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 (BA0608) 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 (BA0608). COX-1/Cyclooxygenase-1/PTGS1 was detected in a paraffin-embedded section of human colorectal adenocarcinoma 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 (BA0608) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.