

COX1 Polyclonal Antibody

Catalog # AP63392

Specification

COX1 Polyclonal Antibody - Product Information

Application	WB
Primary Accession	P23219
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal

COX1 Polyclonal Antibody - Additional Information

Gene ID 5742

Other Names

PTGS1; COX1; Prostaglandin G/H synthase 1; Cyclooxygenase-1; COX-1; Prostaglandin H2 synthase 1; PGH synthase 1; PGHS-1; PHS 1; Prostaglandin-endoperoxide synthase 1

Dilution

WB~~WB: 1:1000

Format

PBS, pH 7.4, containing 0.02% sodium azide as Preservative and 50% Glycerol.

Storage Conditions

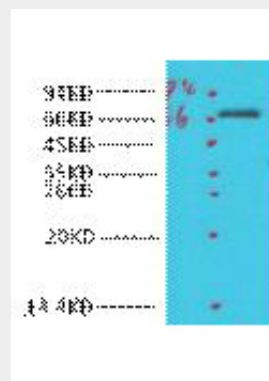
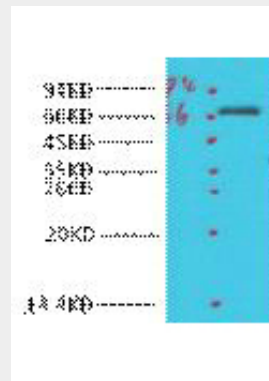
-20°C

COX1 Polyclonal Antibody - Protein Information

Name PTGS1 ([HGNC:9604](#))

Function

Dual cyclooxygenase and peroxidase in the biosynthesis pathway of prostanoids, a class of C20 oxylipins mainly derived from arachidonate, with a particular role in the inflammatory response. The cyclooxygenase activity oxygenates arachidonate (AA, C20:4(n-6)) to the hydroperoxy endoperoxide prostaglandin G2 (PGG2), and the peroxidase activity reduces PGG2 to the hydroxy endoperoxide PGH2, the precursor of all 2-series prostaglandins and thromboxanes. This



COX1 Polyclonal Antibody - Background

Converts arachidonate to prostaglandin H2 (PGH2), a committed step in prostanoid synthesis. Involved in the constitutive production of prostanoids in particular in the stomach and platelets. In gastric epithelial cells, it is a key step in the generation of prostaglandins, such as prostaglandin E2 (PGE2), which plays an important role in cytoprotection. In platelets, it is involved in the generation of thromboxane A2 (TXA2), which promotes platelet activation and aggregation, vasoconstriction and proliferation of vascular smooth muscle cells.

complex transformation is initiated by abstraction of hydrogen at carbon 13 (with S-stereochemistry), followed by insertion of molecular O₂ to form the endoperoxide bridge between carbon 9 and 11 that defines prostaglandins. The insertion of a second molecule of O₂ (bis-oxygenase activity) yields a hydroperoxy group in PGG₂ that is then reduced to PGH₂ by two electrons (PubMed:7947975). Involved in the constitutive production of prostanoids in particular in the stomach and platelets. In gastric epithelial cells, it is a key step in the generation of prostaglandins, such as prostaglandin E₂ (PGE₂), which plays an important role in cytoprotection. In platelets, it is involved in the generation of thromboxane A₂ (TXA₂), which promotes platelet activation and aggregation, vasoconstriction and proliferation of vascular smooth muscle cells (Probable).

Cellular Location

Microsome membrane; Peripheral membrane protein. Endoplasmic reticulum membrane; Peripheral membrane protein

COX1 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)