

**PTGS1 antibody - N-terminal region**  
**Rabbit Polyclonal Antibody**  
**Catalog # AI11946**

**Specification**

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**PTGS1 antibody - N-terminal region - Product Information**

Application	IHC, WB
Primary Accession	<a href="#">P23219</a>
Other Accession	<a href="#">NM_000962</a> , <a href="#">NP_000953</a>
Reactivity	Human, Mouse, Rat, Pig, Sheep, Horse, Bovine, Dog
Predicted Host	Human, Mouse, Rat, Pig, Horse, Dog
Clonality	Rabbit
Calculated MW	Polyclonal 66kDa KDa

**PTGS1 antibody - N-terminal region - Additional Information**

**Gene ID** 5742

**Alias Symbol** COX1, COX3, PCOX1, PGG/HS, PGHS-1, PGHS1, PHS1, PTGHS

**Other Names**

Prostaglandin G/H synthase 1, 1.14.99.1, Cyclooxygenase-1, COX-1, Prostaglandin H2 synthase 1, PGH synthase 1, PGHS-1, PHS 1, Prostaglandin-endoperoxide synthase 1, PTGS1, COX1

**Format**

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

**Reconstitution & Storage**

Add 100 ul of distilled water. Final anti-PTGS1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

**Precautions**

PTGS1 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

**PTGS1 antibody - N-terminal region - Protein Information**

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

**Function**

Dual cyclooxygenase and peroxidase that plays an important role in the biosynthesis pathway of prostanoids, a class of C20 oxylipins mainly derived from arachidonate ((5Z,8Z,11Z,14Z)-eicosatetraenoate, AA, C20:4(n-6)), with a particular role in the inflammatory response. The cyclooxygenase activity oxygenates AA to the hydroperoxy endoperoxide prostaglandin G2 (PGG2), and the peroxidase activity reduces PGG2 to the hydroxy endoperoxide prostaglandin H2 (PGH2), the precursor of all 2-series prostaglandins and thromboxanes. This complex

transformation is initiated by abstraction of hydrogen at carbon 13 (with S-stereochemistry), followed by insertion of molecular O<sub>2</sub> to form the endoperoxide bridge between carbon 9 and 11 that defines prostaglandins. The insertion of a second molecule of O<sub>2</sub> (bis-oxygenase activity) yields a hydroperoxy group in PGG<sub>2</sub> that is then reduced to PGH<sub>2</sub> by two electrons (PubMed:<a href="http://www.uniprot.org/citations/7947975" target="\_blank">7947975</a>). 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 E<sub>2</sub> (PGE<sub>2</sub>), which plays an important role in cytoprotection. In platelets, it is involved in the generation of thromboxane A<sub>2</sub> (TXA<sub>2</sub>), which promotes platelet activation and aggregation, vasoconstriction and proliferation of vascular smooth muscle cells (Probable). Can also use linoleate (LA, (9Z,12Z)- octadecadienoate, C<sub>18</sub>:2(n-6)) as substrate and produce hydroxyoctadecadienoates (HODEs) in a regio- and stereospecific manner, being (9R)-HODE ((9R)-hydroxy-(10E,12Z)-octadecadienoate) and (13S)- HODE ((13S)-hydroxy-(9Z,11E)-octadecadienoate) its major products (By similarity).

#### Cellular Location

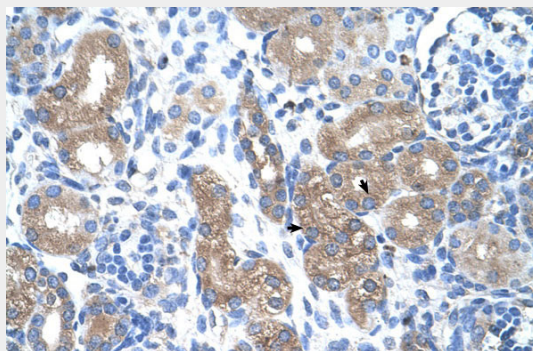
Microsome membrane; Peripheral membrane protein. Endoplasmic reticulum membrane; Peripheral membrane protein

#### PTGS1 antibody - N-terminal region - Protocols

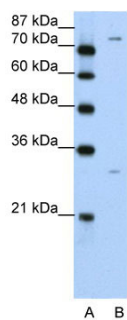
Provided below are standard protocols that you may find useful for product applications.

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

#### PTGS1 antibody - N-terminal region - Images



Rabbit Anti-PTGS1 Antibody  
Paraffin Embedded Tissue: Human Kidney  
Cellular Data: Epithelial cells of renal tubule  
Antibody Concentration: 4.0-8.0 µg/ml  
Magnification: 400X



WB Suggested Anti-PTGS1 Antibody Titration: 5.0 $\mu$ g/ml  
Positive Control: Jurkat cell lysate