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

Specification

PTGS1 antibody - N-terminal region - Product Information

Application	**IHC, WB**
Primary Accession	P23219
Other Accession	NM_000962, NP_000953
Reactivity	**Human, Mouse, Rat, Pig, Sheep, Horse, Bovine, Dog**
Predicted	**Human, Mouse, Rat, Pig, Horse, Dog**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**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 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). Can also use linoleate (LA, (9Z,12Z)- octadecadienoate, C18:2(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).

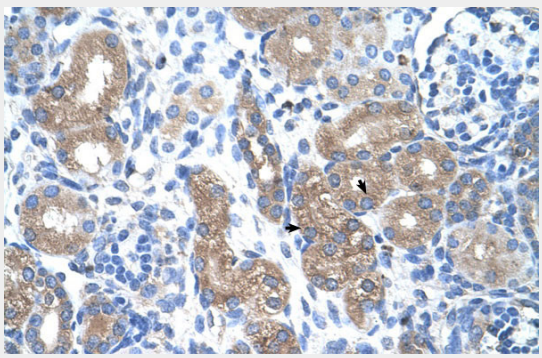
Cellular Location
Microsome membrane; Peripheral membrane protein. Endoplasmic reticulum membrane; Peripheral membrane protein

PTGS1 antibody - N-terminal region - Protocols

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

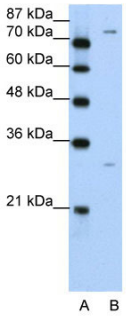
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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

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WB Suggested Anti-PTGS1 Antibody Titration: 5.0µg/ml
Positive Control: Jurkat cell lysate