

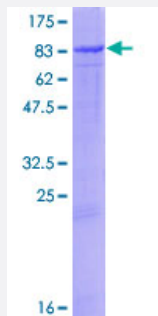
Full-Length

PTGS1 (Human) Recombinant Protein (P01)

Catalog # H00005742-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human PTGS1 full-length ORF (AAH29840.1, 1 a.a. - 599 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MSRSLLLRFLFLLLPPLPVLLADPGAPTPVNPCCYPCQHQGICVRFGLDRYQCDCTRTGYSG
PNCTIPGLWTWLRNSLRPSPSFTHFLTHGRWFWEFVNATFIREMLMRLVLTVRSNLIPSPPTYNS
AHDYISWESFSNVSYYTRILPSVPKDCPTPMGTGKGGKQLPDAQLLARRFLLRRKFIPDPQGTNLMF
AFFAQHFTHQFFKTS GKMGPGFTKALGHGVDLGHYGDNLERQYQLRLF KDGKLYQVLDGEMY
PPSVEEAPVLMHYPRGIPPQSQMAVGQEVFGLLPGLMLYATLWLREHNRVCDLLKAEHPTWGD
EQLFQTTRLILIGETIKVIEEYVQQLSGYFLQLKFDPELLFGVQFQYRNRIAMEFNHLYHWHPLMPDS
FKVGSQEYSYEQFLFNTSMLVDYGVEALVDAFSRQIAGRIGGGRNMDHHILHVAVDVIRESREMRL
QPFNEYRKRFGMKPYTSFQELVGEKEMAAELEELYGDIDALEFYPGLLLEKCHPNSIFGESMIEIG
APFSLKGLLGNPICSPEYWKPSTFGGEVGFNIVKTATLKKLVCLNTKTCPYVSFRVPDASQDDGP
AVERPSTEL

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

95.1

Preparation Method

[in vitro wheat germ expression system](#)

Purification

Glutathione Sepharose 4 Fast Flow

Quality Control Testing

12.5% SDS-PAGE Stained with Coomassie Blue.

Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — PTGS1

Entrez GeneID	5742
GeneBank Accession#	BC029840.1
Protein Accession#	AAH29840.1
Gene Name	PTGS1
Gene Alias	COX1, COX3, PCOX1, PGG/HS, PGHS-1, PGHS1, PHS1, PTGHS
Gene Description	prostaglandin-endoperoxide synthase 1 (prostaglandin G/H synthase and cyclooxygenase)
Omim ID	176805
Gene Ontology	Hyperlink
Gene Summary	Prostaglandin-endoperoxide synthase (PTGS), also known as cyclooxygenase, is the key enzyme in prostaglandin biosynthesis, and acts both as a dioxygenase and as a peroxidase. There are two isozymes of PTGS: a constitutive PTGS1 and an inducible PTGS2, which differ in their regulation of expression and tissue distribution. This gene encodes PTGS1, which regulates angiogenesis in endothelial cells, and is inhibited by nonsteroidal anti-inflammatory drugs such as aspirin. PTGS1 is thought to be involved in cell-cell signaling and maintaining tissue homeostasis. Alternative splicing of this gene generates two transcript variants. The expression of these two transcripts is differentially regulated by relevant cytokines and growth factors. [provided by RefSeq]
Other Designations	OTTHUMP00000022052 OTTHUMP00000022053 prostaglandin G/H synthase and cyclooxygenase prostaglandin-endoperoxide synthase 1

Pathway

- [Arachidonic acid metabolism](#)
- [Metabolic pathways](#)

Disease

- [Abdominal Pain](#)
- [Adenocarcinoma](#)
- [Adenoma](#)
- [Adenomatous Polyps](#)
- [Alzheimer disease](#)
- [Asthma](#)
- [Atherosclerosis](#)
- [Atrophy](#)
- [Brain Ischemia](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Calcinosis](#)
- [Cardiovascular Diseases](#)
- [Cerebrovascular Accident](#)
- [Chorioamnionitis](#)
- [Chronic Disease](#)
- [Colitis](#)
- [Colonic Polyps](#)
- [Colorectal Neoplasms](#)
- [Connective Tissue Diseases](#)

- [Coronary Artery Disease](#)
- [Coronary Disease](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Ductus Arteriosus](#)
- [Duodenal Ulcer](#)
- [Dyspepsia](#)
- [Edema](#)
- [Esophageal Neoplasms](#)
- [Fetal Diseases](#)
- [Fetal Membranes](#)
- [Genetic Predisposition to Disease](#)
- [Helicobacter Infections](#)
- [Hypertension](#)
- [Hypertrophy](#)
- [Infant](#)
- [Infection](#)
- [Inflammation](#)
- [Kidney Diseases](#)
- [Kidney Failure](#)
- [Lung Neoplasms](#)
- [Lymphoma](#)
- [Metabolic Syndrome X](#)
- [Musculoskeletal Diseases](#)
- [Myocardial Infarction](#)
- [Neoplasms](#)

- [Obstetric Labor](#)
- [Osteoporosis](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)
- [Pain](#)
- [Peptic Ulcer](#)
- [Peptic Ulcer Hemorrhage](#)
- [Precancerous Conditions](#)
- [Pre-Eclampsia](#)
- [Pregnancy Complications](#)
- [Premature Birth](#)
- [Pulmonary Disease](#)
- [Recurrence](#)
- [Renal Insufficiency](#)
- [Schizophrenia](#)
- [Skin Diseases](#)
- [Stomach Neoplasms](#)
- [Stomach Ulcer](#)
- [Stroke](#)
- [Urinary Bladder Neoplasms](#)
- [Vascular Diseases](#)
- [Werner syndrome](#)