

PTGR1 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP5941C

Specification

PTGR1 Antibody (Center) - Product Information

Application	WB,E
Primary Accession	Q14914
Other Accession	NP_001139580.1 , NP_001139581.1 , NP_036344.2
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	35870
Antigen Region	177-205

PTGR1 Antibody (Center) - Additional Information

Gene ID 22949

Other Names

Prostaglandin reductase 1, PRG-1, 131-, 15-oxoprostaglandin 13-reductase, NADP-dependent leukotriene B4 12-hydroxydehydrogenase, PTGR1, LTB4DH

Target/Specificity

This PTGR1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 177-205 amino acids from the Central region of human PTGR1.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

PTGR1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

PTGR1 Antibody (Center) - Protein Information

Name PTGR1

Synonyms LTB4DH

Function NAD(P)H-dependent oxidoreductase involved in metabolic inactivation of pro- and anti-inflammatory eicosanoids: prostaglandins (PG), leukotrienes (LT) and lipoxins (LX) (PubMed:[25619643](#)). Catalyzes with high efficiency the reduction of the 13,14 double bond of 15-oxoPGs, including 15-oxo-PGE1, 15-oxo-PGE2, 15-oxo-PGF1-alpha and 15-oxo-PGF2-alpha (PubMed:[25619643](#)). Catalyzes with lower efficiency the oxidation of the hydroxyl group at C12 of LTB4 and its derivatives, converting them into biologically less active 12-oxo-LTB4 metabolites (By similarity) (PubMed:[25619643](#)). Reduces 15-oxo-LXA4 to 13,14 dihydro-15-oxo-LXA4, enhancing neutrophil recruitment at the inflammatory site (By similarity). May play a role in metabolic detoxification of alkenals and ketones. Reduces alpha,beta-unsaturated alkenals and ketones, particularly those with medium-chain length, showing highest affinity toward (2E)-decenal and (3E)-3-nonen-2-one (PubMed:[25619643](#)). May inactivate 4-hydroxy-2-nonenal, a cytotoxic lipid constituent of oxidized low-density lipoprotein particles (By similarity).

Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:Q29073}.

Tissue Location

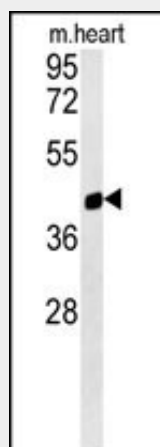
High expression in the kidney, liver, and intestine but not in leukocytes.

PTGR1 Antibody (Center) - 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](#)

PTGR1 Antibody (Center) - Images



PTGR1 Antibody (Center) (Cat. #AP5941c) western blot analysis in mouse heart tissue lysates (15ug/lane). This demonstrates the PTGR1 antibody detected PTGR1 protein (arrow).

PTGR1 Antibody (Center) - Citations

- [TSR2 Induces laryngeal cancer cell apoptosis through inhibiting NF-κB signaling pathway.](#)
- [Knockdown of prostaglandin reductase 1 \(PTGR1\) suppresses prostate cancer cell proliferation by inducing cell cycle arrest and apoptosis.](#)
- [High Expression of PTGR1 Promotes NSCLC Cell Growth via Positive Regulation of Cyclin-Dependent Protein Kinase Complex.](#)
- [Effect of prostaglandin reductase 1 \(PTGR1\) on gastric carcinoma using lentivirus-mediated system.](#)