10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PTGR1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP5941C

Product Information

Application	WB, E
Primary Accession	Q14914
Other Accession	NP_001139580.1, NP_001139581.1, NP_036344.2
Reactivity	Human, Mouse
Predicted	Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB27311
Calculated MW	35870
Antigen Region	177-205

Additional Information

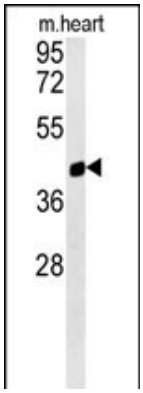
Gene ID	22949
Other Names	Prostaglandin reductase 1, PRG-1, 131-, 15-oxoprostaglandin 13-reductase, NADP-dependent leukotriene B4 12-hydroxydehydrogenase, PTGR1, LTB4DH
Target/Specificity	This PTGR1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 177-205 amino 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.

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.

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).

Citations

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.