

Anti-PTGR1 Antibody

Rabbit polyclonal antibody to PTGR1 Catalog # AP61338

Product Information

ApplicationWBPrimary AccessionQ14914Other AccessionQ91YR9

Reactivity Human, Mouse

HostRabbitClonalityPolyclonalCalculated MW35870

Additional Information

Gene ID 22949

Other Names LTB4DH; Prostaglandin reductase 1; PRG-1; 15-oxoprostaglandin

13-reductase; NADP-dependent leukotriene B4 12-hydroxydehydrogenase

Target/Specificity KLH-conjugated synthetic peptide encompassing a sequence within the center

region of human PTGR1. The exact sequence is proprietary.

Dilution WB~~WB (1/500 - 1/1000)

Format Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30%

glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

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:<u>25619643</u>). 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:<u>25619643</u>). 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).

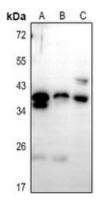
Cellular Location Cytoplasm {ECO:0000250 | UniProtKB:Q29073}.

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

Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human PTGR1. The exact sequence is proprietary.

Images



Western blot analysis of PTGR1 expression in HEK293T (A), HepG2 (B), mouse kidney (C) whole cell lysates.

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