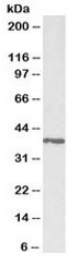
PTGR2 Antibody / Prostaglandin reductase 2 (R36438)

Catalog No.	Formulation	Size
R36438-100UG	0.5 mg/ml in 1X TBS, pH7.3, with 0.5% BSA (US sourced) and 0.02% sodium azide	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Goat
Clonality	Polyclonal (goat origin)
Isotype	Goat Ig
Purity	Antigen affinity
Gene ID	145482
Applications	Western blot: 1-3ug/ml ELISA (peptide) LOD: 1:128000
Limitations	This PTGR2 antibody is available for research use only.



PTGR2 Antibody Pig Testis Western Blot. Western blot analysis of pig testis lysate using PTGR2 Antibody at 1 Âµg/ml demonstrates a distinct band at approximately 38-40 kDa, consistent with the predicted molecular weight of Prostaglandin Reductase 2 (PTGR2). PTGR2 is a NADPH-dependent oxidoreductase involved in prostaglandin metabolism and eicosanoid signaling regulation. Detection of the expected molecular weight band in pig testis tissue supports expression of PTGR2 and the suitability of this antibody for western blot analysis.

Description

PTGR2 antibody is useful for studying PTGR2, a NADPH-dependent oxidoreductase involved in the metabolism and inactivation of bioactive prostaglandins and related eicosanoid signaling molecules. PTGR2 catalyzes the reduction of prostaglandin intermediates and contributes to the regulation of lipid mediator activity within cells. By controlling the abundance and biologic activity of prostaglandins, PTGR2 helps modulate cellular responses associated with inflammation, tissue homeostasis, metabolism, and stress adaptation.

PTGR2 is a member of a broader network of prostaglandin-metabolizing enzymes that function to terminate or modify signaling initiated by cyclooxygenase-derived lipid mediators. Proper regulation of prostaglandin signaling is essential for maintaining balanced inflammatory responses and normal physiologic function. Altered prostaglandin metabolism has been associated with chronic inflammatory conditions, cardiovascular disorders, metabolic dysfunction, and tumor progression, making PTGR2 an increasingly relevant target for biomedical research.

The PTGR2 protein is primarily localized within the cytoplasm, where it participates in intracellular prostaglandin processing and lipid metabolism pathways. Because prostaglandin signaling influences cellular proliferation, apoptosis, angiogenesis, immune regulation, and tissue repair, PTGR2 has attracted interest as a component of larger eicosanoid signaling networks. Studies examining PTGR2 expression can provide insight into mechanisms that govern inflammatory regulation and cellular adaptation to physiologic stress.

Emerging evidence suggests that PTGR2 may contribute to broader metabolic and redox-regulatory processes beyond prostaglandin catabolism alone. Through its effects on bioactive lipid mediators, PTGR2 may influence signaling pathways involved in oxidative stress responses, cellular differentiation, and disease-associated metabolic remodeling. As a result, PTGR2 continues to be investigated in fields ranging from inflammation research to cancer biology and metabolic disease studies.

PTGR2 antibodies are commonly used in western blotting, immunohistochemistry, immunofluorescence, flow cytometry, and related protein detection applications. These reagents support investigations of prostaglandin metabolism, lipid signaling, inflammatory responses, and disease-associated alterations in eicosanoid regulation. PTGR2 antibody tools can help researchers characterize expression patterns and biologic functions associated with this important prostaglandin regulatory enzyme.

Researchers studying prostaglandin metabolism, lipid signaling pathways, and metabolic regulatory enzymes may also be interested in our broader Metabolism Antibody collection.

Application Notes

Optimal dilution of the PTGR2 antibody should be determined by the researcher.

Immunogen

Amino acids PDNINEGQVQVRT were used as the immunogen for this PTGR2 antibody.

Storage

Aliquot and store the PTGR2 antibody at -20oC.

Alternate Names

Prostaglandin Reductase 2 Antibody, PG Reductase 2 Antibody, Prostaglandin 9-Ketoreductase Antibody, Eicosanoid Metabolism Enzyme Antibody, Lipid Mediator Metabolism Protein Antibody, NADPH-dependent Oxidoreductase Antibody

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