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Goat Anti-Prostaglandin dehydrogenase 1 Antibody

Peptide-affinity purified goat antibody
Catalog # AF1869a

Specification

Goat Anti-Prostaglandin dehydrogenase 1 Antibody - Product Information

Application	**WB, IHC, E**
Primary Accession	P15428
Other Accession	NP_000851, 3248
Reactivity	**Human**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**28977**

Goat Anti-Prostaglandin dehydrogenase 1 Antibody - Additional Information

Gene ID 3248

Other Names
15-hydroxyprostaglandin dehydrogenase [NAD(+)], 15-PGDH, 1.1.1.141, Prostaglandin dehydrogenase 1, HPGD, PGDH1

Dilution
WB~~1:1000
IHC~~1:100~500
E~~N/A

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-Prostaglandin dehydrogenase 1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-Prostaglandin dehydrogenase 1 Antibody - Protein Information

Name HPGD (HGNC:5154)

Synonyms PGDH1, SDR36C1

Function
Catalyzes the NAD-dependent dehydrogenation (oxidation) of a broad array of hydroxylated polyunsaturated fatty acids (mainly eicosanoids and docosanoids, including prostaglandins, lipoxins and resolvins), yielding their corresponding keto (oxo) metabolites (PubMed:10837478, PubMed:16757471, PubMed:16828555, PubMed:21916491, PubMed:25586183, PubMed:8086429). Decreases the levels of the pro- proliferative prostaglandins such as prostaglandin E2 (whose activity is increased in cancer because of an increase in the expression of cyclooxygenase 2) and generates oxo-fatty acid products that can profoundly influence cell function by abrogating pro-inflammatory cytokine expression (PubMed:15574495, PubMed:25586183). Converts resolvins E1, D1 and D2 to their oxo products, which represents a mode of resolvin inactivation. Resolvin E1 plays important roles during the resolution phase of acute inflammation, while resolvins D1 and D2 have a unique role in obesity-induced adipose inflammation (PubMed:16757471, PubMed:22844113).

Cellular Location
Cytoplasm.

Tissue Location
Detected in colon epithelium (at protein level).

Goat Anti-Prostaglandin dehydrogenase 1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-Prostaglandin dehydrogenase 1 Antibody - Images

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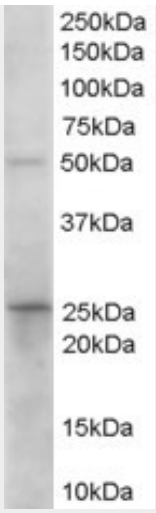
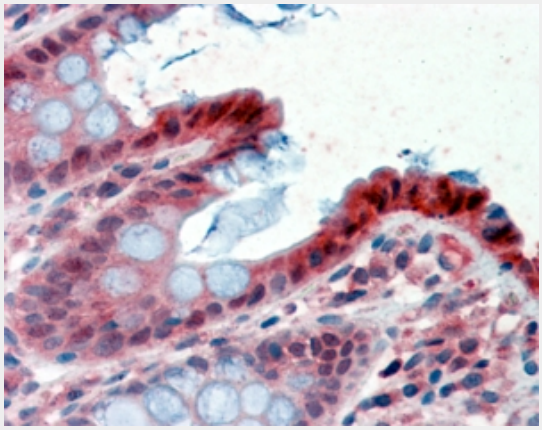


AF1869a (0.1 µg/ml) staining of Human Duodenum lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



AF1869a (2.5 µg/ml) staining of paraffin embedded Human Colon. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

Goat Anti-Prostaglandin dehydrogenase 1 Antibody - Background

This gene encodes a member of the short-chain nonmetalloenzyme alcohol dehydrogenase protein family. The encoded enzyme is responsible for the metabolism of prostaglandins, which function in a variety of physiologic and cellular processes such as inflammation. Mutations in this gene result in primary autosomal recessive hypertrophic osteoarthropathy and cranioosteoarthropathy. Multiple transcript variants encoding different isoforms have been found for this gene.

Goat Anti-Prostaglandin dehydrogenase 1 Antibody - References

Genetic variation and antioxidant response gene expression in the bronchial airway epithelium of smokers at risk for lung cancer. Wang X, et al. PLoS One, 2010 Aug 3. PMID 20689807.
A genetic association study of maternal and fetal candidate genes that predispose to preterm prelabor rupture of membranes (PROM). Romero R, et al. Am J Obstet Gynecol, 2010 Jul 29. PMID 20673868.
Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.
Identification of fetal and maternal single nucleotide polymorphisms in candidate genes that predispose to spontaneous preterm labor with intact membranes. Romero R, et al. Am J Obstet Gynecol, 2010 May. PMID 20452482.

Loss of 15-hydroxyprostaglandin dehydrogenase expression contributes to bladder cancer progression. Tseng-Rogenski S, et al. Am J Pathol, 2010 Mar. PMID 20093479.