

HPGD Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6794b

Specification

HPGD Antibody (C-term) - Product Information

Application Primary Accession	FC, IHC-P, WB,E P15428
Other Accession	<u>08MIY8</u>
Reactivity	Human
Predicted	Monkey
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	28977
Antigen Region	184-212

HPGD Antibody (C-term) - Additional Information

Gene ID 3248

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

Target/Specificity

This HPGD antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 184-212 amino acids from the C-terminal region of human HPGD.

Dilution FC~~1:10~50 IHC-P~~1:50~100 WB~~1:2000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

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

HPGD Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

HPGD Antibody (C-term) - 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:<u>10837478</u>, PubMed:<u>16757471</u>, PubMed:<u>16828555</u>, PubMed:<u>21916491</u>, PubMed:<u>25586183</u>, PubMed:<u>8086429</u>). 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:<u>15574495</u>, PubMed:<u>25586183</u>). 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:<u>16757471</u>, PubMed:<u>22844113</u>).

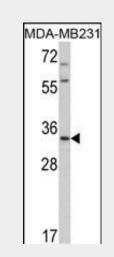
Cellular Location Cytoplasm.

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

HPGD Antibody (C-term) - Protocols

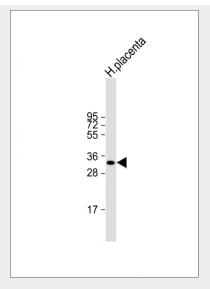
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- HPGD Antibody (C-term) Images

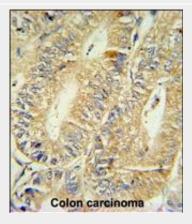


Western blot analysis of HPGD Antibody (C-term) (Cat. #AP6794b) in MDA-MB231 cell line lysates (35ug/lane). HPGD (arrow) was detected using the purified Pab.

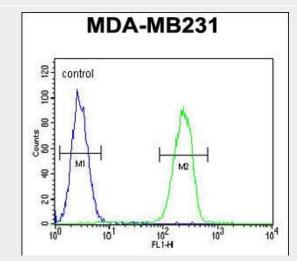




Anti-HPGD Antibody (C-term) at 1:2000 dilution + human placenta lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 29 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



HPGD Antibody (C-term) (Cat. #AP6794b) IHC analysis in formalin fixed and paraffin embedded human colon carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the HPGD Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



HPGD Antibody (C-term) (Cat. #AP6794b) flow cytometric analysis of MDA-MB231 cells (right



histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

HPGD Antibody (C-term) - Background

HPGD is a member of the short-chain nonmetalloenzyme alcohol dehydrogenase protein family. This protein is responsible for the metabolism of prostaglandins, which function in a variety of physiologic and cellular processes such as inflammation.

HPGD Antibody (C-term) - References

Thill, M., et.al., Anticancer Res. 29 (9), 3619-3625 (2009)