

# HPGD Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP6794b

## Specification

# HPGD Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

### <u>P15428</u>

# HPGD Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 3248

**Other Names** 

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

#### Target/Specificity

The synthetic peptide sequence used to generate the antibody <a

href=/products/AP6794b>AP6794b</a> was selected from the C-term region of human HPGD. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions** This product is for research use only. Not for use in diagnostic or therapeutic procedures.

# HPGD Antibody (C-term) Blocking Peptide - Protein Information

Name HPGD (<u>HGNC:5154</u>)

### 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:<a href="http://www.uniprot.org/citations/8086429" target="\_blank">8086429</a>, PubMed:<a href="http://www.uniprot.org/citations/10837478" target="\_blank">10837478</a>, PubMed:<a href="http://www.uniprot.org/citations/16828555" target="\_blank">16828555</a>, PubMed:<a href="http://www.uniprot.org/citations/16828555" target="\_blank">16828555</a>, PubMed:<a href="http://www.uniprot.org/citations/16757471" target="\_blank">16757471</a>, PubMed:<a href="http://www.uniprot.org/citations/16757471" target="\_blank">21916491</a>, PubMed:<a href="http://www.uniprot.org/citations/16757471" target="\_blank">21916491</a>, PubMed:<a href="http://www.uniprot.org/citations/21916491" target="\_blank">21916491</a>, PubMed:<a href="http://www.uniprot.org/citations/25586183" target="\_blank">21916491</a>, PubMed:<a href="http://www.uniprot.org/citations/25586183" target="\_blank">21916491</a>, PubMed:<a href="http://www.uniprot.org/citations/25586183" target="\_blank">21916491</a>, PubMed:<a href="http://www.uniprot.org/citations/25586183" target="\_blank">25586183</a>). 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:<a href="http://www.uniprot.org/citations/25586183" target="\_blank">25586183</a>, PubMed:<a href="http://www.uniprot.org/citations/25586183" target="\_blank">25586183</a>, PubMed:<a href="http://www.uniprot.org/citations/15574495" target="\_blank">15574495</a>). 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:<a href="http://www.uniprot.org/citations/16757471" target="\_blank">16757471</a>, PubMed:<a href="http://www.uniprot.org/citations/16757471" target="\_blank">22844113</a>).

Cellular Location Cytoplasm.

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

# HPGD Antibody (C-term) Blocking Peptide - Protocols

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

<u>Blocking Peptides</u>

#### HPGD Antibody (C-term) Blocking Peptide - Images

#### HPGD Antibody (C-term) Blocking Peptide - 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) Blocking Peptide - References

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