

PTGES Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP8589a**Specification**

PTGES Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [O14684](#)**PTGES Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 9536**Other Names**

Prostaglandin E synthase, Microsomal glutathione S-transferase 1-like 1, MGST1-L1, Microsomal prostaglandin E synthase 1, MPGES-1, p53-induced gene 12 protein, PTGES, MGST1L1, MPGES1, PGES, PIG12

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP8589a](/products/AP8589a) was selected from the N-term region of human PTGES. 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.

PTGES Antibody (N-term) Blocking Peptide - Protein Information**Name** PTGES**Function**

Terminal enzyme of the cyclooxygenase (COX)-2-mediated prostaglandin E2 (PGE2) biosynthetic pathway. Catalyzes the glutathione-dependent oxidoreduction of prostaglandin endoperoxide H2 (PGH2) to prostaglandin E2 (PGE2) in response to inflammatory stimuli (PubMed: [10377395](http://www.uniprot.org/citations/10377395), PubMed: [10869354](http://www.uniprot.org/citations/10869354), PubMed: [12244105](http://www.uniprot.org/citations/12244105), PubMed: [12460774](http://www.uniprot.org/citations/12460774), PubMed: [12672824](http://www.uniprot.org/citations/12672824), PubMed: [18682561](http://www.uniprot.org/citations/18682561)). Plays a key role in inflammation response, fever and pain (By similarity). Also catalyzes the oxidoreduction of

endocannabinoids into prostaglandin glycerol esters and PGG2 into 15-hydroperoxy-PGE2 (PubMed:12244105, PubMed:12672824). In addition, displays low glutathione transferase and glutathione- dependent peroxidase activities, toward 1-chloro-2,4-dinitrobenzene and 5-hydroperoxyicosatetraenoic acid (5-HPETE), respectively (PubMed:12672824).

Cellular Location

Membrane; Multi-pass membrane protein. Cytoplasm, perinuclear region. Note=Colocalizes with PTGS1/COX-1 and PTGS2/COX-2 in the perinuclear compartment

PTGES Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

PTGES Antibody (N-term) Blocking Peptide - Images**PTGES Antibody (N-term) Blocking Peptide - Background**

PTGES is a glutathione-dependent prostaglandin E synthase. The expression of it has been shown to be induced by proinflammatory cytokine interleukin 1 beta (IL1B). Its expression can also be induced by tumor suppressor protein TP53, and may be involved in TP53 induced apoptosis. Knockout studies in mice suggest that it may contribute to the pathogenesis of collagen-induced arthritis and mediate acute pain during inflammatory responses.

PTGES Antibody (N-term) Blocking Peptide - References

Mattila,S.,et.al.,Neuropathology 29 (2), 156-165 (2009)Menon,R.,et.al., Reprod. Biol. Endocrinol. 7, 62 (2009)Jakobsson,P.J.,et.al.,Protein Sci. 8 (3), 689-692 (1999)