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PTGES2 Blocking Peptide (Center)

Synthetic peptide
Catalog # BP21806c

Specification

PTGES2 Blocking Peptide (Center) - Product Information

Primary Accession Q9H7Z7

PTGES2 Blocking Peptide (Center) - Additional Information

Gene ID 80142

Other Names
Prostaglandin E synthase 2, Membrane-associated prostaglandin E synthase-2, mPGE synthase-2, Microsomal prostaglandin E synthase 2, mPGES-2, Prostaglandin-H(2) E-isomerase, Prostaglandin E synthase 2 truncated form, PTGES2, C9orf15, PGES2

Target/Specificity
The synthetic peptide sequence is selected from aa 133-146 of HUMAN PTGES2

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.

PTGES2 Blocking Peptide (Center) - Protein Information

Name PTGES2

Synonyms C9orf15, PGES2

PTGES2 Blocking Peptide (Center) - Background

Isomerase that catalyzes the conversion of PGH2 into the more stable prostaglandin E2 (PGE2).

PTGES2 Blocking Peptide (Center) - References

Ota T.,et al.Nat. Genet. 36:40-45(2004).
Totoki Y.,et al.Submitted (APR-2005) to the EMBL/GenBank/DDBJ databases.
Humphray S.J.,et al.Nature 429:369-374(2004).
Tanikawa N.,et al.Biochem. Biophys. Res. Commun. 291:884-889(2002).
Watanabe K.,et al.Biochem. Biophys. Res. Commun. 306:577-581(2003).

Function
Isomerase that catalyzes the conversion of PGH2 into the more stable prostaglandin E2 (PGE2) (in vitro) (PubMed:12804604, PubMed:18198127, PubMed:17585783). The biological function and the GSH- dependent property of PTGES2 is still under debate (PubMed:18198127, PubMed:17585783). In vivo, PTGES2 could form a complex with GSH and heme and would not participate in PGE2 synthesis but would catalyze the degradation of prostaglandin E2 H2 (PGH2) to 12(S)-hydroxy-5(Z),8(E),10(E)-heptadecatrienoic acid (HHT) and malondialdehyde (MDA) (PubMed:17585783) (By similarity).

Cellular Location
Golgi apparatus membrane; Single-pass membrane protein

Tissue Location
Widely expressed. Expressed in the heart, including apex, inter-ventricular septum, both atria and ventricles, but not in the aorta. Also expressed in fetal heart. Detected in various regions of the brain: cerebellum; occipital, frontal and parietal lobes. Also expressed in the lymph nodes, skeletal muscle, kidney and trachea, but not in the thymus or lung. Overexpressed in colorectal cancer

PTGES2 Blocking Peptide (Center) - Protocols

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

- Blocking Peptides