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CYP5A1 Antibody (Center) Blocking peptide
Synthetic peptide
Catalog # BP12077c

Specification

CYP5A1 Antibody (Center) Blocking peptide - Product Information

Primary Accession P24557

CYP5A1 Antibody (Center) Blocking peptide - Additional Information

Gene ID 6916

Other Names
Thromboxane-A synthase, TXA synthase, TXS, Cytochrome P450 5A1, TBXAS1, CYP5, CYP5A1

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.

CYP5A1 Antibody (Center) Blocking peptide - Protein Information

Name TBXAS1

Synonyms CYP5, CYP5A1 {ECO:0000303|PubMed:1146554

Function
Catalyzes the conversion of prostaglandin H2 (PGH2) to thromboxane A2 (TXA2), a potent inducer of blood vessel constriction and platelet aggregation (PubMed:8436233, PubMed:11297515, PubMed:9873013, PubMed:11097184, PubMed:24009185, PubMed:22735388). Cleaves also PGH2 to 12-hydroxy-heptadecatrienoicacid (12-HHT) and malondialdehyde, which is known to act as a mediator of DNA damage. 12- HHT and malondialdehyde are formed stoichiometrically in the same amounts as TXA2 (PubMed:11297515, PubMed:9873013, PubMed:22735388). Additionally, displays dehydratase activity, toward (15S)-hydroperoxy- (5Z,8Z,11Z,13E)-eicosatetraenoate (15(S)-HPETE) producing 15-KETE and 15-HETE (PubMed:<a href="http://www.uniprot.org/citations/17459323"

target="_blank">17459323).

Cellular Location
Endoplasmic reticulum membrane; Multi-pass membrane protein

Tissue Location
Platelets, lung, kidney, spleen, macrophages and lung fibroblasts.

CYP5A1 Antibody (Center) Blocking peptide - Protocols

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

- Blocking Peptides

CYP5A1 Antibody (Center) Blocking peptide - Images

CYP5A1 Antibody (Center) Blocking peptide - Background

This gene encodes a member of the cytochrome P450superfamily of enzymes. The cytochrome P450 proteins aremonooxygenases which catalyze many reactions involved in drugmetabolism and synthesis of cholesterol, steroids and other lipids.However, this protein is considered a member of the cytochrome P450superfamily on the basis of sequence similarity rather thanfunctional similarity. This endoplasmic reticulum membrane proteincatalyzes the conversion of prostglandin H2 to thromboxane A2, apotent vasoconstrictor and inducer of platelet aggregation. Theenzyme plays a role in several pathophysiological processesincluding hemostasis, cardiovascular disease, and stroke.Alternatively spliced transcript variants encoding differentisoforms have been found for this gene.

CYP5A1 Antibody (Center) Blocking peptide - References

Shimada, M., et al. Hum. Genet. 128(4):433-441(2010)Wang, L.H., et al. Prostaglandins Other Lipid Mediat. 68-69, 409-422 (2002) :Tazawa, R., et al. Arch. Biochem. Biophys. 334(2):349-356(1996)Baek, S.J., et al. Gene 173(2):251-256(1996)Wang, L.H., et al. Arch. Biochem. Biophys. 315(2):273-278(1994)