



CP4F3 Monoclonal Antibody

Catalog No	YP-mAb-05057
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	CYP4F3 LTB4H
Immunogen	Synthesized peptide derived from human protein . at AA range: 400-480
Specificity	CP4F3 Monoclonal Antibody detects endogenous levels of protein.
Formulation	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	20-HETE synthase;20-hydroxyeicosatetraenoic acid synthase;CPF3;CYP4F; CYP4F3;CP4F3;CYP4F3 LTB4H;Leukotriene-B(4) omega-hydroxylase 2 (EC 1.14.13.30) (CYP4F3) (Cytochrome P450 4F3) (Cytochrome P450-LTB-omega) (Leukotriene-B(4) 20-monooxygenase 2)
Observed Band	60 kDa
Calculated Molecular Weight	60 kDa
Cell Pathway	Endoplasmic reticulum membrane ; Single-pass membrane protein . Microsome membrane ; Single-pass membrane protein .
Tissue Specificity	[Isoform CYP4F3A]: Selectively expressed in blood neutrophils and bone marrow cells. Coexpressed with CYP4F3B in prostate, ileum and trachea. ; [Isoform CYP4F3B]: Selectively expressed in liver and kidney. It is also the predominant CYP4F isoform in trachea and tissues of the gastrointestinal tract.
Function	catalytic activity:(6Z,8E,10E,14Z)-(5S,12R)-5,12-dihydroxyicosa-6,8,10,14-tetraenoate + NADPH + O(2) = (6Z,8E,10E,14Z)-(5S,12R)-5,12,20-trihydroxyicosa-6,8,10,14-tetraenoate + NADP(+) + H(2)O.,cofactor:Heme group.,enzyme regulation:Inhibited by carbon monoxide (CO)., function:Cytochromes P450 are a group of heme-thiolate monooxygenases. This enzyme requires molecular oxygen and NADPH for the omega-



hydroxylation of LTB₄, a potent chemoattractant for polymorphonuclear leukocytes.,pathway:Lipid metabolism; leukotriene B₄ degradation., similarity:Belongs to the cytochrome P450 family.,tissue specificity:Expressed in the polymorphonuclear leukocytes as well as leukocytes.,

Background

This gene, CYP4F3, encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. This protein localizes to the endoplasmic reticulum. The enzyme starts the process of inactivating and degrading leukotriene B₄, a potent mediator of inflammation. This gene is part of a cluster of cytochrome P450 genes on chromosome 19. Another member of this family, CYP4F8, is approximately 18 kb away. Three transcript variants encoding two different isoforms have been found for this gene. [provided by RefSeq, Nov 2010],

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images