



CYP2A6/7/13 Monoclonal Antibody

Catalog No	YP-mAb-02851
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	CYP2A6/CYP2A7/CYP2A13
Immunogen	Synthesized peptide derived from the Internal region of human CYP2A6/7/13.
Specificity	CYP2A6/7/13 Monoclonal Antibody detects endogenous levels of CYP2A6/7/13 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA 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	CYP2A6/7/13;CYP2A6/CYP2A7/CYP2A13;Cytochrome P450 2A6/Cytochrome P450 2A7/Cytochrome P450 2A13;CYP2A6;CYP2A3;Cytochrome P450 2A6;1,4-cineole 2-exo-monooxygenase;CYPIIA6;Coumarin 7-hydroxylase;Cytochrome P450 IIA3;Cytochrome P450(I);CYP2A7;Cytochrome P450 2A7;CYPIIA7;Cytochrome P450 IIA4;CYP2A13;Cytochrome P450 2A13;CYPIIA13
Observed Band	56kD
Calculated Molecular Weight	56kD
Cell Pathway	Endoplasmic reticulum membrane; Peripheral membrane protein. Microsome membrane; Peripheral membrane protein.
Tissue Specificity	Liver.
Function	catalytic activity:RH + reduced flavoprotein + O(2) = ROH + oxidized flavoprotein + H(2)O.,cofactor:Heme group.,function:Exhibits a high coumarin 7-hydroxylase activity. Can act in the hydroxylation of the anti-cancer drugs cyclophosphamide and ifosphamide. Competent in the metabolic activation of aflatoxin B1. Constitutes the major nicotine C-oxidase.,induction:By phenobarbital and dexamethasone.,online information:CYP2A6 alleles,online information:CYP2A6 entry,similarity:Belongs to the cytochrome P450 family.,tissue specificity:Liver.,



Background

This gene, CYP2A6, 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 and its expression is induced by phenobarbital. The enzyme is known to hydroxylate coumarin, and also metabolizes nicotine, aflatoxin B1, nitrosamines, and some pharmaceuticals. Individuals with certain allelic variants are said to have a poor metabolizer phenotype, meaning they do not efficiently metabolize coumarin or nicotine. This gene is part of a large cluster of cytochrome P450 genes from the CYP2A, CYP2B and CYP2F subfamilies on chromosome 19q. The gene was formerly referred to as CYP2A3; however, it has been renamed CYP2A6. [provided by RefSeq, Jul 2008],

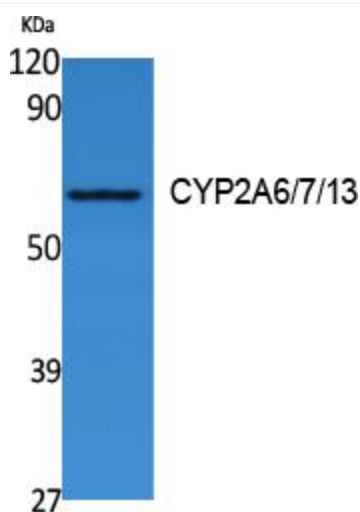
matters needing attention

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



Western Blot analysis of various cells using CYP2A6/7/13 Monoclonal Antibody