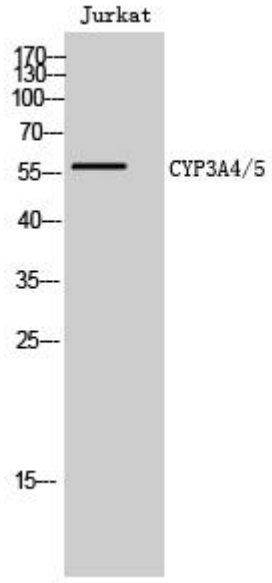
CYP3A4/5 Monoclonal Antibody

Catalog No	YP-mAb-02596
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB
Gene Name	CYP3A4/CYP3A5
Protein Name	Cytochrome P450 3A4/5
Immunogen	The antiserum was produced against synthesized peptide derived from human Cytochrome P450 3A4/5. AA range:251-300
Specificity	CYP3A4/5 Monoclonal Antibody detects endogenous levels of CYP3A4/5 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	CYP3A4; CYP3A3; Cytochrome P450 3A4; 1; 8-cineole 2-exo-monooxygenase; Albendazole monooxygenase; Albendazole sulfoxidase; CYPIIIA3; CYPIIIA4; Cytochrome P450 3A3; Cytochrome P450 HLp; Cytochrome P450 NF-25; Cytochrome P450-PCN1; Nifedipine
Observed Band	57kD
Cell Pathway	Endoplasmic reticulum membrane; Single-pass membrane protein. Microsome membrane ; Single-pass membrane protein.
Tissue Specificity	Expressed in prostate and liver. According to some authors, it is not expressed in brain (PubMed:19094056). According to others, weak levels of expression are measured in some brain locations (PubMed:19359404 and PubMed:18545703). Also expressed in epithelium of the small intestine and large intestine, bile duct, nasal mucosa, kidney, adrenal cortex, epithelium of the gastric mucosa with intestinal metaplasia, gallbladder, intercalated ducts of the pancreas, chief cells of the parathyroid and the corpus luteum of the ovary (at protein level).
Function	catalytic activity:Albendazole + NADPH + O(2) = albendazole S-oxide + NADP(+) + H(2)O.,catalytic activity:Lithocholate + NADPH + O(2) = hyodeoxycholate + NADP(+) + H(2)O.,catalytic activity:Quinine + NADPH + O(2) = 3-hydroxyquinine + NADP(+) + H(2)O.,catalytic activity:Taurochenodeoxycholate + NADPH + O(2) = taurohyocholate + NADP(+) + H(2)O.,cofactor:Heme group.,function:Cytochromes P450 are a group of heme-thiolate

	monooxygenases. In liver microsomes, this enzyme is involved in an NADPH-dependent electron transport pathway. It performs a variety of oxidation reactions (e.g. caffeine 8-oxidation, omeprazole sulphoxidation, midazolam 1'-hydroxylation and midazolam 4-hydroxylation) of structurally unrelated compounds, including steroids, fatty acids, and xenobiotics. The enzyme also hydroxylates etoposide.,induction:By glucocorticoids. Also induced to high levels in liver and other tissue
Background	This gene encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases that 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 glucocorticoids and some pharmacological agents. This enzyme is involved in the metabolism of approximately half the drugs in use today, including acetaminophen, codeine, cyclosporin A, diazepam and erythromycin. The enzyme also metabolizes some steroids and carcinogens. This gene is part of a cluster of cytochrome P450 genes on chromosome 7q21.1. Previously another CYP3A gene, CYP3A3, was thought to exist; however, it is now thought that this sequence represents a transcript variant of CYP3A4. Alternatively spliced transcript variants encoding different isofor
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 CYP3A4/5 Monoclonal Antibody