
Product Name: CYP3A4/5 Rabbit Polyclonal Antibody**Catalog #: APRab09666**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Rat,Mouse
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:200-1:1000,ELISA 1:5000-1:20000
Molecular Weight	57kDa

Antigen Information

Gene Name	CYP3A4/CYP3A5 CYP3A4; CYP3A3; Cytochrome P450 3A4; 1; 8-cineole 2-exo-monooxygenase; Albendazole
Alternative Names	monooxygenase; Albendazole sulfoxidase; CYP3A3; CYP3A4; Cytochrome P450 3A3; Cytochrome P450 HLP; Cytochrome P450 NF-25; Cytochrome P450-PCN1; Nifedipine
Gene ID	1576/1577
SwissProt ID	P08684/P20815
Immunogen	The antiserum was produced against synthesized peptide derived from human Cytochrome P450 3A4/5. AA range:251-300

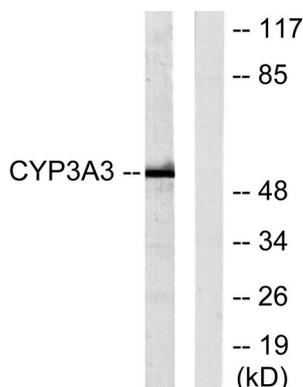
Background

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 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 tissues by various foreign compounds, including drugs, pesticides, and carcinogens., online information: CYP3A4 alleles, online information: CYP3A4 entry, similarity: Belongs to the cytochrome P450 family., tissue specificity: Expressed in prostate and liver.,

Research Area

Steroid hormone biosynthesis; Linoleic acid metabolism; Retinol metabolism; Metabolism of xenobiotics by cytochrome P450; Drug metabolism; Drug metabolism;

Image Data



Western blot analysis of lysates from Jurkat cells, using Cytochrome P450 3A4/5 Antibody. The lane on the right is blocked with the synthesized peptide.

Western Blot analysis of Jurkat cells using CYP3A4/5 Polyclonal Antibody

