Product name:	CYP3A4/5 Rabbit Polyclonal Antibody
Cat number:	ABN09666
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human Cytochrome P450 3A4/5. AA range:251-300
Reactivity:	Human,Rat,Mouse
Applications:	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:200-1:1000,ELISA 1:5000-1:20000
Molecular Weight:	57kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

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 isoforcatalytic 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.,