

# Summary

Production Name	CYP3A4 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human,Rat,Mouse

#### Performance

Conjugation	Unconjugated
Modification	Unmodified
lsotype	lgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw
	cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

#### Immunogen

Gene Name	СҮРЗА4		
Alternative Names	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		
Gene ID	1576.0		
SwissProt ID	P08684.The antiserum was produced against synthesized peptide derived from human		
	Cytochrome P450 3A4. AA range:91-140		

# Application

<b>Dilution Ratio</b>	WB 1:500 - 1:2000. ELISA: 1:5000
Molecular Weight	57kD



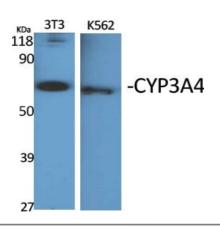
# Background

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 8oxidation, 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**

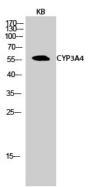
Steroid hormone biosynthesis;Linoleic acid metabolism;Retinol metabolism;Metabolism of xenobiotics by cytochrome P450;Drug metabolism;Drug metabolism;

# Image Data





Western Blot analysis of various cells using CYP3A4 Polyclonal Antibody diluted at 1: 1000



Western Blot analysis of KB cells using CYP3A4 Polyclonal Antibody diluted at 1: 1000

#### Note

For research use only.