

# Rabbit Anti-CYP3A4 antibody

# SL20585R

Product Name:	CYP3A4
Chinese Name:	细胞色素P450 3A4抗体
Alias:	Cytochrome p450 3A4; CP33; CP34; CYP3A; CYP3A3; CYP3A4; CYPIIIA4; CYPIIIA3; Cytochrome P450 family 3 subfamily A polypeptide 4; Cytochrome P450 subfamily IIIA polypeptide 4; Glucocorticoid inducible P450; HLP; MGC126680; NF 25; NF25; P450 III steroid inducible; P450 PCN1; P450C3; P450PCN1; Quinine 3 monooxygenase; Taurochenodeoxycholate 6 alpha hydroxylase; CP3A4_HUMAN; 1,8-cineole 2-exo-monooxygenase; Albendazole monooxygenase; Albendazole sulfoxidase; Cytochrome P450 3A3; Cytochrome P450 HLp; Cytochrome P450 NF-25; Cytochrome P450-PCN1; Nifedipine oxidase; Quinine 3-monooxygenase; Taurochenodeoxycholate 6-alpha-hydroxylase.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human CYP3A4:11-120/503
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	Preservative: 15mM Sodium Azide, Constituents: 1% BSA, 0.01M PBS, pH 7.4
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>

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 isoforms have been identified. [provided by RefSeq, Feb 2011]

#### 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.

## Subcellular Location:

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).

#### Post-translational modifications:

Polyubiquitinated in the presence of AMFR and UBE2G1 and also STUB1/CHIP and UBE2D1 (in vitro).

#### Similarity:

Belongs to the cytochrome P450 family.

**SWISS:** 

P08684

Gene ID:

1576

#### Product Detail:

#### Database links:

Entrez Gene: 1576Human

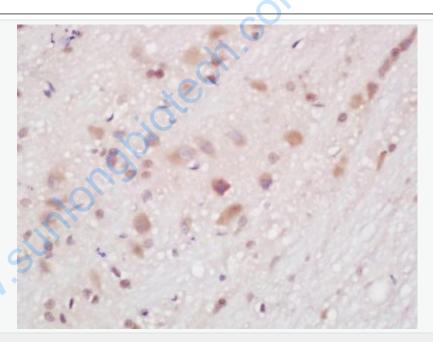
Omim: 124010Human

SwissProt: P08684Human

Unigene: 728751Human

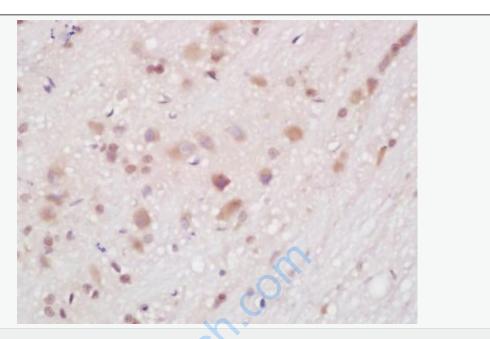
## **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



#### Picture:

Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Incubation: Anti-CYP3A4 Polyclonal Antibody, Unconjugated(SL20585R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



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