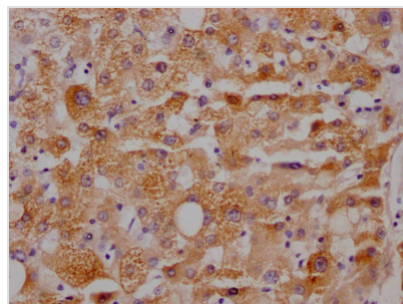




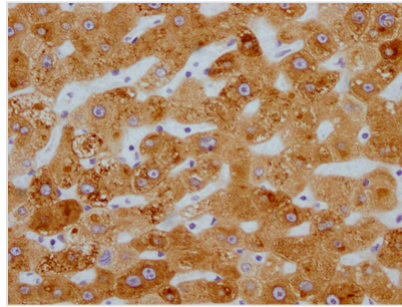
CYP3A4 Antibody

Product Code	CSB-RA153677A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P08684
Immunogen	A synthesized peptide derived from human Cytochrome P450 3A4
Species Reactivity	Human
Tested Applications	ELISA, IHC; Recommended dilution: IHC:1:50-1:200
Relevance	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. Acts as a 1,8-cineole 2-exo-monooxygenase. The enzyme also hydroxylates etoposide (PubMed:11159812). Catalyzes 4-beta-hydroxylation of cholesterol. May catalyze 25-hydroxylation of cholesterol in vitro (PubMed:21576599).
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Cancer; Cardiovascular; Metabolism; Signal transduction
Gene Names	CYP3A4
Accession NO.	10B10

Image



IHC image of CSB-RA153677A0HU diluted at 1:100 and staining in paraffin-embedded human liver tissue performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.



IHC image of CSB-RA153677A0HU diluted at 1:100 and staining in paraffin-embedded human liver cancer performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

Description

CYP3A4 is a prominent cytochrome P450 enzyme that catalyzes a wide range of substrates, including xenobiotics like pharmaceuticals and endogenous substances such as bile acids. CYP3A4 is a key enzyme in bile acid detoxification, hydrolyzing bile acids to promote subsequent glucuronidation by UDP-glucuronosyltransferases (UGTs). As a defense strategy, CYP3A4 is responsively increased in cholestasis via the nuclear receptors farnesol X receptor (FXR) and pregnane X receptor (PXR). Its ability to detoxify bile acids could be used to treat cholestasis, a disorder characterized by bile acid buildup.

The recombinant CYP3A4 antibody expression is induced in mammalian cells transfected with a recombinant plasma vector. The recombinant plasma vector was constructed by inserting the gene coding for the antibody against CYP3A4 into the plasma. The recombinant CYP3A4 antibody was purified from the cell culture medium using Affinity-chromatography. It can react with samples containing CYP3A4 protein from Human and has been validated for use in the ELISA, IHC.