

Rabbit anti-Human Cytochrome P450 3A4/CYP3A4 Polyclonal Antibody | anti-CYP3A4 antibody

Anti-Cytochrome P450 3A4/CYP3A4 Antibody Picoband

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA126010	Rabbit	Human	Flow Cytometry, Functional Assay, Western Blot

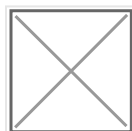
PRODUCT SYNONYMS

Cytochrome P450 3A4/CYP3A4; Polyclonal Antibody; Anti-Cytochrome P450 3A4/CYP3A4 Antibody Picoband; anti-CYP3A4 antibody

PRODUCT SPECIFICATIONS

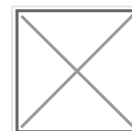
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml. (varies by lot)
Applicable Applications for anti-CYP3A4 antibody	FCM/FACS (Flow Cytometry), WB (Western Blot)
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Immunogen	A synthetic peptide corresponding to a sequence of human Cytochrome P450 3A4/CYP3A4 (NICVFPREVTNFLRKSVKR).
Preparation and Storage	Store at -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months. Avoid repeated freezing and thawing.

IMAGES



FCM/FACS (Flow Cytometry)

Figure 2. Flow Cytometry analysis of HepG2 cells using anti-Cytochrome P450 3A4/CYP3A4 antibody (AAA126010). Overlay histogram showing HepG2 cells stained with AAA126010 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Cytochrome P450 3A4/CYP3A4 Antibody (AAA126010, 1 ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



WB (Western Blot)

Figure 1. Western blot analysis of Cytochrome P450 3A4/CYP3A4 using anti-Cytochrome P450 3A4/CYP3A4 antibody (AAA126010). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human HCCP tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Cytochrome P450 3A4/CYP3A4 antigen affinity purified polyclonal antibody (#AAA126010) at 0.5 ug/mL overnight at 4 degree C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Cytochrome P450 3A4/CYP3A4 at approximately 50 kDa. The expected band size for Cytochrome P450 3A4/CYP3A4 is at 50 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-CYP3A4 antibody	Cytochrome P450 3A4 (abbreviated CYP3A4), is an important enzyme in the body, mainly found in the liver and in the intestine. 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.
Product Categories/Family for anti-CYP3A4 antibody	Primary Antibodies, Rabbit Polyclonal Antibodies

NCBI AND UNIPROT INFORMATION

NCBI GI #	322302351
NCBI GeneID	1576
NCBI Accession #	NP_001189784.1
NCBI GenBank Nucleotide #	NM_001202855.2
UniProt Accession #	P08684; P05184; Q16757; Q9UK50
Molecular Weight	57,343 Da
NCBI Official Full Name	cytochrome P450 3A4 isoform 2
NCBI Official Synonym Full Names	cytochrome P450, family 3, subfamily A, polypeptide 4
NCBI Official Symbol	CYP3A4
NCBI Official Synonym Symbols	HLP; CP33; CP34; CYP3A; NF-25; CYP3A3; P450C3; CYP11A3; CYP11A4; P450PCN1
NCBI Protein Information	cytochrome P450 3A4; nifedipine oxidase; cytochrome P450 3A3; cytochrome P450 HLP; cytochrome P450-PCN1; cytochrome P450 NF-25; albendazole sulfoxidase; quinine 3-monooxygenase; albendazole monooxygenase; P450-III, steroid inducible; glucocorticoid-induci
UniProt Protein Name	Cytochrome P450 3A4
UniProt Gene Name	CYP3A4
UniProt Synonym Gene Names	CYP3A3
UniProt Entry Name	CP3A4_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.