

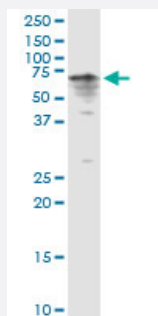
MaxPab®

# CYP3A4 purified MaxPab rabbit polyclonal antibody (D01P)

Catalog # H00001576-D01P

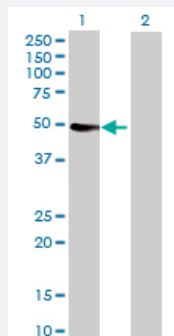
Size 100 ug

## Applications



### Western Blot (Cell lysate)

CYP3A4 MaxPab rabbit polyclonal antibody. Western Blot analysis of CYP3A4 expression in HepG2.



### Western Blot (Transfected lysate)

Western Blot analysis of CYP3A4 expression in transfected 293T cell line ([H00001576-T01](#)) by CYP3A4 MaxPab polyclonal antibody.

Lane 1: CYP3A4 transfected lysate(57.30 KDa).

Lane 2: Non-transfected lysate.

## Specification

### Product Description

Rabbit polyclonal antibody raised against a full-length human CYP3A4 protein.

### Immunogen

CYP3A4 (AAI01632.1, 1 a.a. ~ 503 a.a) full-length human protein.

### Sequence

MALIPDLAMETWLLLA VSLVLLLYLGTHSHGLFKKLGIPGPTPLPFLGNILSYHKGFCMFDMECHKK  
YGVVWGFYDGGQPVLAITDPDMIKTVLVKECYSVFTNRRPFGPVGFMKSAISIAEDEEWKRLRSL  
SPTFTSGKLKEMVPIAQYGDVLRNLRREAETGKPVTLKDVFGAYSMDVITSTSFGVNIDSLNNPQ  
DPFVENTKKLLRFDLDPFFLSITVPFLIPILEVNICVFPREVTNFLRKS VKRMKESRLED TQKHR  
VDFLQLMDSQNSKETESHKALSDLELVAQSIIFAGYETTSSVLSFIMYELATHPDVQQKLQEEID  
AVLPNKAPPTYDTVLQMEYLD MVVNETLRLFP IAMRLERVCKKDVEINGMFIPKGVVVMIPSYALH  
RDPKYWTEPEKFLPERFSKKNKDNDPYYTPFGSGPRNCIGMRFALNMK LALIRVLQNFSFKPC  
KETQIPLKLSLGLLQPEKPVVLKVESRDGTVSGA

|                               |                                                                          |
|-------------------------------|--------------------------------------------------------------------------|
| Host                          | Rabbit                                                                   |
| Reactivity                    | Human                                                                    |
| Interspecies Antigen Sequence | Rat (72)                                                                 |
| Quality Control Testing       | Antibody reactive against mammalian transfected lysate.                  |
| Storage Buffer                | In 1x PBS, pH 7.4                                                        |
| Storage Instruction           | Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing. |

## Applications

- Western Blot (Cell lysate)

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[Protocol Download](#)

- Western Blot (Transfected lysate)

Western Blot analysis of CYP3A4 expression in transfected 293T cell line ([H00001576-T01](#)) by CYP3A4 MaxPab polyclonal antibody.

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Lane 2: Non-transfected lysate.

[Protocol Download](#)

## Gene Info — CYP3A4

|                     |                                                                    |
|---------------------|--------------------------------------------------------------------|
| Entrez GeneID       | <a href="#">1576</a>                                               |
| GeneBank Accession# | <a href="#">NM_017460.3</a>                                        |
| Protein Accession#  | <a href="#">AA01632.1</a>                                          |
| Gene Name           | CYP3A4                                                             |
| Gene Alias          | CP33, CP34, CYP3A, CYP3A3, HLP, MGC126680, NF-25, P450C3, P450PCN1 |
| Gene Description    | cytochrome P450, family 3, subfamily A, polypeptide 4              |
| Omim ID             | <a href="#">124010</a>                                             |
| Gene Ontology       | <a href="#">Hyperlink</a>                                          |

## Gene Summary

This gene, CYP3A4, encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases which 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 which are used 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. [provided by RefSeq]

## Other Designations

P450-III, steroid inducible|cytochrome P450, subfamily IIIA (nifedipine oxidase), polypeptide 3|cytochrome P450, subfamily IIIA (nifedipine oxidase), polypeptide 4|cytochrome P450, subfamily IIIA, polypeptide 4|glucocorticoid-inducible P450|nifedipine o

## Publication Reference

- [Development and validation of an enzyme-linked immunosorbent assay for the quantification of cytochrome 3A4 in human liver microsomes.](#)

De Bock L, Colin P, Boussey K, Van Bocxlaer J.

Talanta 2012 Sep; 99:357.

Application: ELISA, Human, Liver samples were collected from the diseased liver from children undergoing liver transplantation

## Pathway

- [Drug metabolism - cytochrome P450](#)
- [Drug metabolism - other enzymes](#)
- [gamma-Hexachlorocyclohexane degradation](#)
- [Linoleic acid metabolism](#)
- [Metabolic pathways](#)
- [Metabolism of xenobiotics by cytochrome P450](#)
- [Retinol metabolism](#)

## Disease

- [Acquired Immunodeficiency Syndrome](#)

- [Acute Disease](#)
- [Adenocarcinoma](#)
- [Adenoma](#)
- [Akathisia](#)
- [Anemia](#)
- [Asthma](#)
- [Balkan Nephropathy](#)
- [Body Weight](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Central Nervous System Diseases](#)
- [Cholestasis](#)
- [Chronic Disease](#)
- [Colorectal Neoplasms](#)
- [Coronary Artery Disease](#)
- [Coronary Disease](#)
- [Depressive Disorder](#)
- [Diabetes Mellitus](#)
- [Diarrhea](#)
- [Disease Progression](#)
- [Disease Susceptibility](#)
- [Drug Hypersensitivity](#)
- [Drug Toxicity](#)
- [Drug-Induced Liver Injury](#)

- [Dyskinesia](#)
- [Dyslipidemias](#)
- [Edema](#)
- [Endometrial Neoplasms](#)
- [Epidermal Necrolysis](#)
- [Epilepsy](#)
- [Esophageal Neoplasms](#)
- [Exanthema](#)
- [Femur Head Necrosis](#)
- [Gastritis](#)
- [Gastrointestinal Stromal Tumors](#)
- [Genetic Predisposition to Disease](#)
- [Gilbert Disease](#)
- [Glomerulonephritis](#)
- [Head and Neck Neoplasms](#)
- [Helicobacter Infections](#)
- [Hepatitis](#)
- [Hepatitis C](#)
- [Heroin Dependence](#)
- [HIV Infections](#)
- [HIV Seropositivity](#)
- [Hodgkin Disease](#)
- [Hyperbilirubinemia](#)
- [Hypercholesterolemia](#)
- [Hyperlipidemias](#)
- [Hypertension](#)

- [Hypopharyngeal Neoplasms](#)
- [Inflammation](#)
- [Kidney Diseases](#)
- [Kidney Failure](#)
- [Kidney Neoplasms](#)
- [Laryngeal Neoplasms](#)
- [Leukemia](#)
- [Leukopenia](#)
- [Liver Cirrhosis](#)
- [Liver Failure](#)
- [Liver Neoplasms](#)
- [Long QT syndrome](#)
- [Lung carcinoma](#)
- [Lung Neoplasms](#)
- [Lymphatic Metastasis](#)
- [Lymphoma](#)
- [Malaria](#)
- [Metabolic Syndrome X](#)
- [Migraine Disorders](#)
- [Mouth Neoplasms](#)
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- [Muscular Diseases](#)
- [Myelodysplastic Syndromes](#)
- [Myocardial Infarction](#)
- [Nasopharyngeal Neoplasms](#)
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- [Neoplasm Invasiveness](#)
- [Neoplasm Metastasis](#)
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- [Thrombophilia](#)
- [Tobacco Use Disorder](#)
- [Urinary Bladder Neoplasms](#)
- [Urogenital Neoplasms](#)
- [Vomiting](#)