

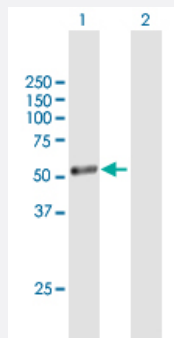
MaxPab®

CYP1A1 purified MaxPab mouse polyclonal antibody (B01P)

Catalog # H00001543-B01P

Size 50 ug

Applications



Western Blot (Transfected lysate)

Western Blot analysis of CYP1A1 expression in transfected 293T cell line ([H00001543-T01](#)) by CYP1A1 MaxPab polyclonal antibody.

Lane 1: CYP1A1 transfected lysate(56.32 KDa).

Lane 2: Non-transfected lysate.

Specification

Product Description

Mouse polyclonal antibody raised against a full-length human CYP1A1 protein.

Immunogen

CYP1A1 (NP_000490.1, 1 a.a. ~ 512 a.a) full-length human protein.

Sequence

MLFPISMSATEFLLASVIFCLVFWVIRASRPQVPKGLKNPPGPWGWLIGHMLTLGKNPHLALSR
MSQQYGDVLQIRIGSTPVVLSGLDTIRQALVRQGDDFKGRPDLYTFTLISNGQSMSFSPDSGPV
WAARRRLAQNGLKSFASIADPASSTSCYLEEHVSKEAEVLSTLQELMAGPGHFNPYRYVVSVT
NVICAICFGRRYDHNHQELLSLVNLNNNFGEVVGSGNPADFIPILRYLPNPSLNAFKDLNEKFYSFM
QKMVKEHYKTFEKGHIRDITDSLIEHCQEKQLDENANVQLSDEKIINVLDFGAGFDTVTTAISWSL
MYLVMNPRVQRKIQEELDTVIGRSRRPRLSDRSHLPYMEAFIETFRHSSFVPFTIPHSTTRDTSK
GFYIPKGRCVFVNQWQINHDQKLWVNPSEFLPERFLTPDGAIDKVLSEKVIIFGMGKRKCIGETIAR
WEVFLFLAILLQRVEFSVPLGVKVDMPYIGLTMKHACCEHFQMQLRS

Host

Mouse

Reactivity

Human

Interspecies Antigen Sequence

Mouse (80)

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 (Transfected lysate)

Western Blot analysis of CYP1A1 expression in transfected 293T cell line ([H00001543-T01](#)) by CYP1A1 MaxPab polyclonal antibody.

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Lane 2: Non-transfected lysate.

[Protocol Download](#)

Gene Info — CYP1A1

Entrez GeneID

[1543](#)

GeneBank Accession#

[NM_000499.2](#)

Protein Accession#

[NP_000490.1](#)

Gene Name

CYP1A1

Gene Alias

AHH, AHRR, CP11, CYP1, P1-450, P450-C, P450DX

Gene Description

cytochrome P450, family 1, subfamily A, polypeptide 1

Omim ID

[108330](#)

Gene Ontology

[Hyperlink](#)

Gene Summary

This gene, CYP1A1, 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 some polycyclic aromatic hydrocarbons (PAHs), some of which are found in cigarette smoke. The enzyme's endogenous substrate is unknown; however, it is able to metabolize some PAHs to carcinogenic intermediates. The gene has been associated with lung cancer risk. A related family member, CYP1A2, is located approximately 25 kb away from CYP1A1 on chromosome 15. [provided by RefSeq]

Other Designations

aryl hydrocarbon hydroxylase|cytochrome P1-450, dioxin-inducible|cytochrome P450 1A1|cytochrome P450, subfamily I (aromatic compound-inducible), polypeptide 1|flavoprotein-linked monooxygenase|xenobiotic monooxygenase

Publication Reference

- [Deregulation of signaling pathways controlling cell survival and proliferation in cancer cells alters induction of cytochrome P450 family 1 enzymes.](#)

Martin Krkoška, Jana Svobodová, Markéta Kabátková, Ondřej Zapletal, Alena Hyršlová Vaculová, Jana Nekvindová, Jan Vondráček.

Toxicology 2021 Sep; 461:152897.

Application: WB-Ce, WB-Tr, Human, HepaRG cells

- [Butyrate alters expression of cytochrome P450 1A1 and metabolism of benzo\[a\]pyrene via its histone deacetylase activity in colon epithelial cell models.](#)

Zapletal O, Tylichová Z, Neča J, Kohoutek J, Machala M, Milcová A, Pokorná M, Topinka J, Moyer MP, Hofmanová J, Kozubík A, Vondráček J.

Archives of Toxicology 2016 Nov; [Epub].

Application: WB-Ce, Human, Caco-2, HCT-116 cells

- [Inhibition of \$\beta\$ -catenin signalling promotes DNA damage elicited by benzo\[a\]pyrene in a model of human colon cancer cells via CYP1 deregulation.](#)

Kabatkova M, Zapletal O, Tylichova Z, Neca J, Machala M, Milcova A, Topinka J, Kozubik A, Vondracek J.

Mutagenesis 2015 Jul; 30(4):565.

Application: WB, Human, HCT116 cells

Pathway

- [Metabolism of xenobiotics by cytochrome P450](#)
- [Retinol metabolism](#)
- [Tryptophan metabolism](#)

Disease

- [Abortion](#)
- [Acute Disease](#)
- [Adenocarcinoma](#)
- [Adenoma](#)
- [Alcoholism](#)

- [Alcohol-Related Disorders](#)
- [Alzheimer disease](#)
- [Amyotrophic lateral sclerosis](#)
- [Anemia](#)
- [Arteriosclerosis](#)
- [Arthritis](#)
- [Asperger Syndrome](#)
- [Asthma](#)
- [Atherosclerosis](#)
- [Autistic Disorder](#)
- [Behcet Syndrome](#)
- [Birth Weight](#)
- [Bone Diseases](#)
- [Bone Resorption](#)
- [Brain Neoplasms](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Bronchitis](#)
- [Calcinosis](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Cell Transformation](#)
- [Central Nervous System Diseases](#)
- [Cerebral Infarction](#)
- [Cerebrovascular Accident](#)
- [Cervical Intraepithelial Neoplasia](#)

- [Cholestasis](#)
- [Chorioamnionitis](#)
- [Chromosome Aberrations](#)
- [Chronic Disease](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Cocarcinogenesis](#)
- [Cognition](#)
- [Colon cancer](#)
- [Colonic Neoplasms](#)
- [Colonic Polyps](#)
- [Colorectal Neoplasms](#)
- [Congenital Abnormalities](#)
- [Connective Tissue Diseases](#)
- [Coronary Artery Disease](#)
- [Coronary Disease](#)
- [Crohn Disease](#)
- [Cryptorchidism](#)
- [Cystadenocarcinoma](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Disease Susceptibility](#)
- [DNA Damage](#)
- [Ductus Arteriosus](#)
- [Dysmenorrhea](#)
- [Echinococcosis](#)

- [Edema](#)
- [Endometrial Hyperplasia](#)
- [Endometrial Neoplasms](#)
- [Endometriosis](#)
- [Environmental Illness](#)
- [Esophageal Neoplasms](#)
- [Eye Diseases](#)
- [Fetal Diseases](#)
- [Fetal Growth Retardation](#)
- [Fibroadenoma](#)
- [Focal Nodular Hyperplasia](#)
- [Gallbladder Neoplasms](#)
- [Gaucher disease](#)
- [Genetic Predisposition to Disease](#)
- [Genital Diseases](#)
- [Genomic Instability](#)
- [Glioma](#)
- [Graves Disease](#)
- [Head and Neck Neoplasms](#)
- [Hepatitis](#)
- [Hepatitis B](#)
- [Hepatitis C](#)
- [Hidradenitis Suppurativa](#)
- [HIV Infections](#)
- [Hodgkin Disease](#)
- [Hot Flashes](#)

- [Hypercholesterolemia](#)
- [Hypersensitivity](#)
- [Hypertension](#)
- [Hypopharyngeal Neoplasms](#)
- [Hypospadias](#)
- [Infant](#)
- [Infection](#)
- [Infertility](#)
- [Inflammation](#)
- [Kidney Failure](#)
- [Kidney Neoplasms](#)
- [Laryngeal Neoplasms](#)
- [Leiomyoma](#)
- [Leiomyomatosis](#)
- [Leukemia](#)
- [Leukemia-Lymphoma](#)
- [Leukoplakia](#)
- [Liver Cirrhosis](#)
- [Liver Diseases](#)
- [Liver Neoplasms](#)
- [Lung carcinoma](#)
- [Lung Neoplasms](#)
- [Lupus Erythematosus](#)
- [Lymphoma](#)
- [Macular Degeneration](#)
- [Malignant melanoma](#)

- [Manganese Poisoning](#)
- [Melanoma](#)
- [Meningioma](#)
- [Mental Disorders](#)
- [Mesothelioma](#)
- [Microsatellite Instability](#)
- [Mouth Abnormalities](#)
- [Mouth Neoplasms](#)
- [Multiple Myeloma](#)
- [Musculoskeletal Diseases](#)
- [Myelodysplastic Syndromes](#)
- [Nasopharyngeal Neoplasms](#)
- [Neoplasm Invasiveness](#)
- [Neoplasm Metastasis](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Neuroma](#)
- [Neuropsychological Tests](#)
- [Neurotoxicity Syndromes](#)
- [Obesity](#)
- [Obstetric Labor](#)
- [Occupational Diseases](#)
- [Oligospermia](#)
- [Oropharyngeal Neoplasms](#)
- [Osteoporosis](#)
- [Otorhinolaryngologic Neoplasms](#)

- [Ovarian cancer](#)
- [Ovarian Failure](#)
- [Ovarian Neoplasms](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Pancreatitis](#)
- [Papillomavirus Infections](#)
- [Parkinson disease](#)
- [Periodontitis](#)
- [Peripheral Nervous System Diseases](#)
- [Pharyngeal Neoplasms](#)
- [Pleural Neoplasms](#)
- [Pneumonia](#)
- [Polycystic Ovary Syndrome](#)
- [Precancerous Conditions](#)
- [Pre-Eclampsia](#)
- [Pregnancy Complications](#)
- [Premature Birth](#)
- [Prenatal Exposure Delayed Effects](#)
- [Prostate cancer](#)
- [Prostatic Hyperplasia](#)
- [Prostatic Neoplasms](#)
- [Psoriasis](#)
- [Puberty](#)
- [Pulmonary Disease](#)
- [Pulmonary Emphysema](#)

- [Rectal Neoplasms](#)
- [Recurrence](#)
- [Respiratory Tract Diseases](#)
- [Rhinitis](#)
- [Roseolovirus Infections](#)
- [Seminoma](#)
- [Skin Diseases](#)
- [Skin Neoplasms](#)
- [Social Perception](#)
- [Spondylitis](#)
- [Stomach Neoplasms](#)
- [Sudden Infant Death](#)
- [Testicular Neoplasms](#)
- [Thrombophilia](#)
- [Thyroid Neoplasms](#)
- [Tobacco Use Disorder](#)
- [Tuberculosis](#)
- [Urinary Bladder Neoplasms](#)
- [Uterine Cervical Neoplasms](#)
- [Uterine Neoplasms](#)
- [Werner syndrome](#)