SunLong Biotech Co.,LTD
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[Primary Antibody]

Rabbit Anti-CYP1A1 antibody

Catalog Number: SL1606R

FOR RESEARCH USE ONLY

[DATASHEET]

Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Target:	CYP1A1
Immunogen:	KLH conjugated synthetic peptide derived from human CYP1A1: 361-460/512 <Cytoplasmic>
Purification:	affinity purified by Protein A
Concentration:	1mg/ml
Storage:	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Applications:	WB=1:500-2000 IHC-P=1:100-500 IHC-F=1:100-500 IF=1:100-500 （Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Reactivity:	Human,Mouse,Rat(predicted:Pig)
Predicted MW.:	58kDa
Subcellular Location:	cytoplasmic The cell membrane
Background:	The Cytochrome P450 (P450) superfamily of enzymes is one of three enzyme systems which metabolize the fatty acid arachadonic acid (AA) to regulators of vascular tone. P450 enzymes are monooxygenase enzymes which require several cofactors such as nicotinamide adenine dinucleotide phosphate (NADPH) and P450 reductase. There are over 200 known genes which encode P450s. Epoxygenases are those P450s which metabolize AA to epoxyeicosatrienoic acid (EETs) and omega hydroxylases are those P450s which produce 19- and 20-hydroxyeicosatetraenoic acids (19- and 20-HETE). As well as fatty acid metabolism, P450s also metabolize many drugs and toxins. Cytochrome P450 3A4 is abundantly expressed in liver and small intestine and is inducible by barbiturates, glucocorticoids and rifampicin.

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

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	Function: Mediates dioxin toxicity and is involved in regulation of cell growth and differentiation. Represses the transcription activity of AHR by competing with this transcription factor for heterodimer formation with the ARNT and subsequently binding to the xenobiotic response element (XRE) sequence present in the promoter regulatory region of variety of genes. Represses CYP1A1 by binding the XRE sequence and recruiting ANKRA2, HDAC4 and/or HDAC5. Autoregulates its expression by associating with its own XRE site. **Subcellular Location:** Cytochrome P450 1A1: Cytoplasm. Cytochrome P450MT2A: Endoplasmic reticulum membrane. Mitochondrion membrane. Microsome membrane. Cytochrome P450MT2B: Endoplasmic reticulum. Mitochondrion. **Tissue Specificity:** Highly expressed in testis, lung, ovary, spleen and pancreas. Highly expressed in mononuclear cells (MNCs) from umbilical cord blood. Isoform 3 is highly expressed in lung, kidney, spleen and thymus. Down-regulated malignant tissue from different anatomical origins, including colon, breast, lung, stomach, cervix, and ovary. **Similarity:** Belongs to the cytochrome P450 family. **Database links:** **Entrez Gene:** 57491 Human **Entrez Gene:** 11624 Mouse **Entrez Gene:** 498999 Rat Omim: 606517 Human **SwissProt:** A9YTQ3 Human **SwissProt:** Q3U1U7 Mouse **SwissProt:** Q75NT5 Rat **Unigene:** 50823 Human **Unigene:** 290446 Mouse **Unigene:** 145524 Rat Synthesis and Degradation（Synthesis and Degradation）

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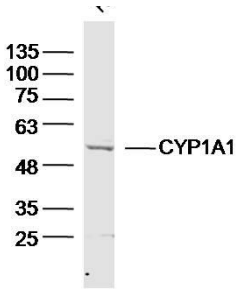
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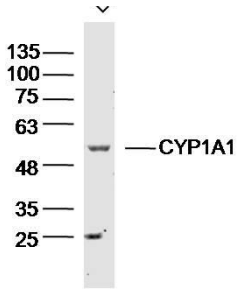
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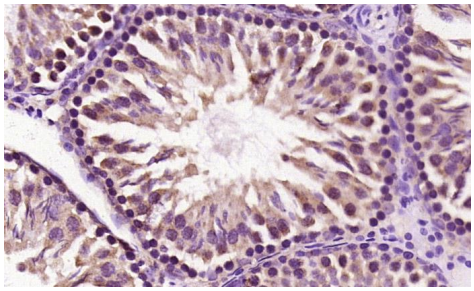
[VALIDATION IMAGES]



Sample:K562 Cell (Human) Lysate at 30 ug
Primary: Anti- CYP1A1 (SL1606R)at 1/300 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 58kD
Observed band size: 58kD



Sample:Lung (Mouse) Lysate at 40 ug
Primary: Anti- CYP1A1 (SL1606R)at 1/300 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 58kD
Observed band size: 58kD



Paraformaldehyde-fixed, paraffin embedded (rat testis tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CYP1A1) Polyclonal Antibody, Unconjugated (SL1606R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

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