For Research Use Only

CYP3A4 Polyclonal antibody

Catalog Number:18227-1-AP 97 Publications

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Basic Information

Catalog Number:
18227-1-AP

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG13074

GenBank Accession Number:
BC101631

GeneID (NCBI):
1576

UNIPROT ID:
P08684

Full Name:
cytochrome P450, family 3, subfamily A, polypeptide 4

Calculated MW:
503 aa, 57 kDa

Observed MW:
51-57 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB: 1:5000-1:50000
IHC: 1:50-1:500

Applications

Tested Applications:
WB, IHC, ELISA

Cited Applications:
WB, IHC, IF

Species Specificity:
human, mouse, rat

Cited Species:
human, mouse, rat, monkey

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : mouse liver tissue, rat liver tissue

IHC : human liver tissue,

Background Information

Cytochrome P450 3A(CYP3A) belongs to the cytochrome P450 family and the enzymes constitute an important detoxification system that contributes to primary metabolism of more than half of all prescribed medications.CYP3A expression determines impairment of drug absorption and efficient systemic clearance in a tissue-specific manner(PMID:17975676). The highest amounts of drug-metabolizing cytochromes P-450 are found in the liver and intestine, with lower amounts found in other organs, including the kidney, lung, and brain. LPS that has reached the circulation stimulates a TLR4-dependent mechanism in the periphery, evoking a reduction in Cyp3a11 expression and metabolism in the liver (PMID: 15878984). Human CYP3A4 is homologous to five mouse P450 isoforms, namely, Cyp3a11, Cyp3a16, Cyp3a41a, Cyp3a41b, and Cyp3a44 (PMID: 22446519). And CYP3A4 is also the human homologue of rat CYP3A1 and CYP3A2 (PMID: 27546062, PMID: 32874920).

Notable Publications

Author	Pubmed ID	Journal	Application
Zhenyu Wang	31588244	Theranostics	IHC
Chengming Wen	34575568	Pharmaceutics	WB
Linjie Lv	25203445	Hepatology	IF

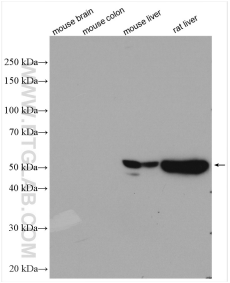
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

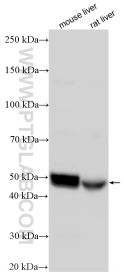
For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

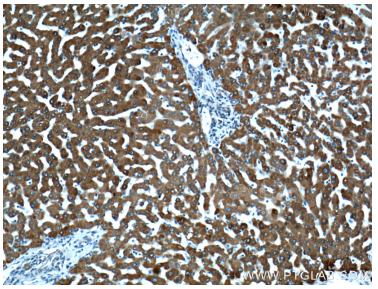
Selected Validation Data



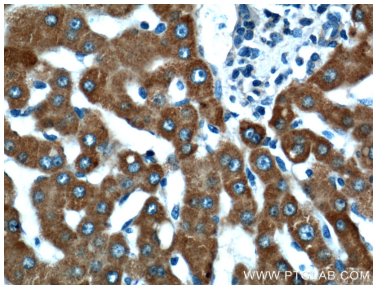
Various lysates were subjected to SDS PAGE followed by western blot with 18227-1-AP (CYP3A4 antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours (mouse brain tissue and mouse colon tissue are negative control).



Various lysates were subjected to SDS PAGE followed by western blot with 18227-1-AP (CYP3A4 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 18227-1-AP (CYP3A4 Antibody) at dilution of 1:200 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 18227-1-AP (CYP3A4 Antibody) at dilution of 1:200 (under 40x lens).