

For Research Use Only

# CYP7A1 Polyclonal antibody

Catalog Number: 18054-1-AP

17 Publications



## Basic Information

|   |  |  |
|---|--|--|
| <b>Catalog Number:</b><br>18054-1-AP                          | <b>GenBank Accession Number:</b><br>BC101777                               | <b>Purification Method:</b><br>Antigen affinity purification |
| <b>Size:</b><br>150ul , Concentration: 450 ug/ml by Nanodrop; | <b>GeneID (NCBI):</b><br>1581  | <b>Recommended Dilutions:</b><br>WB 1:1000-1:6000            |
| <b>Source:</b><br>Rabbit                                      | <b>UNIPROT ID:</b><br>P22680   | IHC 1:50-1:500   |
| <b>Isotype:</b><br>IgG  | <b>Full Name:</b><br>cytochrome P450, family 7, subfamily A, polypeptide 1 | IF/ICC 1:50-1:500  |
| <b>Immunogen Catalog Number:</b><br>AG12572                   | <b>Calculated MW:</b><br>504 aa, 58 kDa                                    |  |
|   | <b>Observed MW:</b><br>58 kDa  |  |

## Applications

|  |  |
|--|--|
| <b>Tested Applications:</b><br>WB, IHC, IF/ICC, ELISA  | <b>Positive Controls:</b>  |
| <b>Cited Applications:</b><br>WB, IHC  | <b>WB :</b> HepG2 cells, HuH-7 cells, L02 cells, SMMC-7721 cells |
| <b>Species Specificity:</b><br>human   | <b>IHC :</b> human liver tissue, human liver cancer tissue       |
| <b>Cited Species:</b><br>human, mouse, rat, hamster  | <b>IF/ICC :</b> HepG2 cells,                                     |
| <b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b> |  |

## Background Information

CYP7A1 (Cytochrome P450 Family 7 Subfamily A Member 1), is a cholesterol 7 $\alpha$ -hydroxylase, catalyzing the first and rate-limiting step in the neutral or classic pathway for bile acid biosynthesis. CYP7A1 is a postulated gene modifier of colorectal cancer risk and target for the therapeutic bile acid, ursodeoxycholic acid (UDCA). The CYP7A1 enzyme controls the rate-limiting step of the catabolism of cholesterol into bile acids in the liver.

## Notable Publications

| Author           | Pubmed ID | Journal                    | Application |
|------------------|-----------|----------------------------|-------------|
| Disi Bai         | 29722875  | Toxicol Sci                | WB          |
| Shinkichi Kosaka | 35367370  | J Steroid Biochem Mol Biol | IHC         |
| Yao Jiang        | 29922118  | Food Nutr Res              | WB          |

## Storage

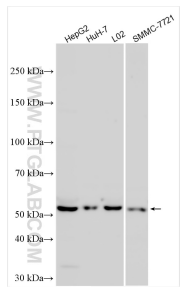
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:  
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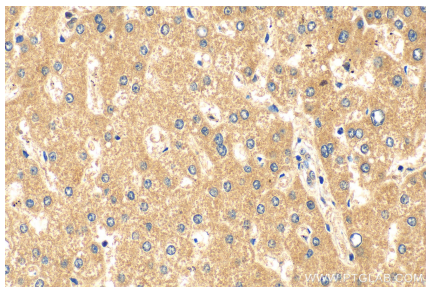
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## Selected Validation Data

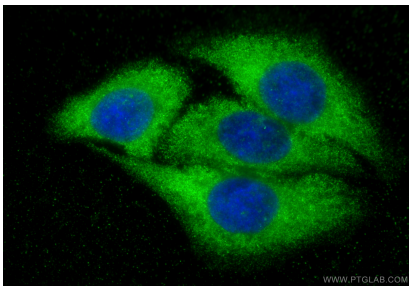


Various lysates were subjected to SDS PAGE followed by western blot with 18054-1-AP (CYP7A1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.

Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 18054-1-AP (CYP7A1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 18054-1-AP (CYP7A1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using CYP7A1 antibody (18054-1-AP) at dilution of 1:200 and Multi-rAb CoraLite ® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002).