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Anti-Cytochrome P450 39A1 Antibody

Catalog # AP59839

Product Information

Application	WB, IHC, IF/IC
Primary Accession	Q9NYL5
Reactivity	Human, Mouse, Rat, Pig, Mk
Host	Rabbit
Clonality	Polyclonal
Calculated MW	54116

Additional Information

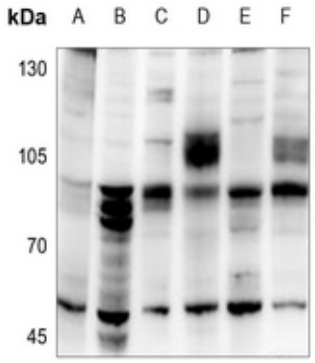
Gene ID	51302
Other Names	24-hydroxycholesterol 7-alpha-hydroxylase; Cytochrome P450 39A1; hCYP39A1; Oxysterol 7-alpha-hydroxylase
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human Cytochrome P450 39A1. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IHC (1/100 - 1/200) IHC~~WB (1/500 - 1/1000), IHC (1/100 - 1/200) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

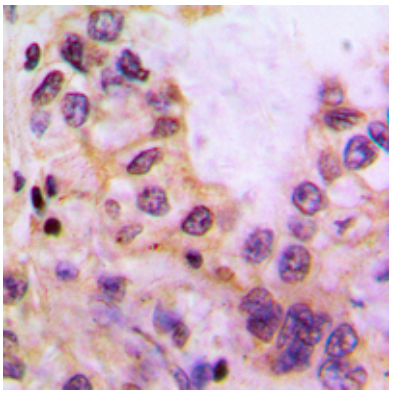
Name	CYP39A1 {ECO:0000303|PubMed:25201972, ECO:0000312|HGNC:HGNC:17449}
Function	A cytochrome P450 monooxygenase involved in neural cholesterol clearance through bile acid synthesis (PubMed:10748047, PubMed:25201972). Catalyzes 7-alpha hydroxylation of (24S)- hydroxycholesterol, a neural oxysterol that is metabolized to bile acids in the liver (PubMed:10748047, PubMed:25201972). Mechanistically, uses molecular oxygen inserting one oxygen atom into a substrate, and reducing the second into a water molecule, with two electrons provided by NADPH via cytochrome P450 reductase (CPR; NADPH-ferrihemoprotein reductase) (PubMed:10748047, PubMed:25201972).
Cellular Location	Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:Q64654}; Multi-pass membrane protein. Microsome membrane {ECO:0000250|UniProtKB:Q64654}; Multi-pass membrane protein

Tissue Location Liver specific..

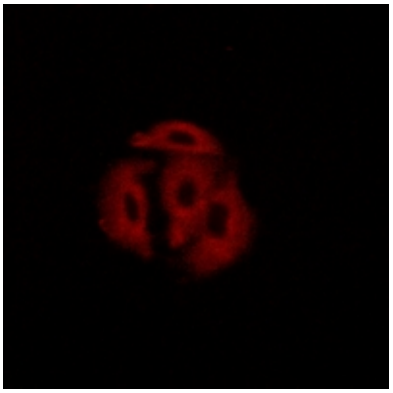
Images



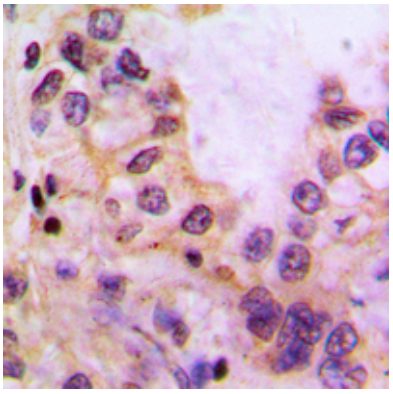
Western blot analysis of Cytochrome P450 39A1 expression in C6 (A), AML12 (B), PC3 (C), Panc1 (D), HEK293T (E), HepG2 (F) whole cell lysates. (Predicted band size: 54 kD; Observed band size: 54 kD)



Immunohistochemical analysis of Cytochrome P450 39A1 staining in human liver cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of Cytochrome P450 39A1 staining in A549 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF594-conjugated secondary antibody (red) in PBS at room temperature in the dark.



Immunohistochemical analysis of Cytochrome P450 39A1 staining in human liver cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.