For Research Use Only

FMO5-specific Polyclonal antibody

Catalog Number: 16864-1-AP

Featured Product

2 Publications



Basic Information

Catalog Number: GenBank Accession Number: 16864-1-AP NM_001461
Size: GeneID (NCBI): 2330
Source: UNIPROT ID: P49326

Full Name: flavin containing monooxygenase 5

Calculated MW: 60 kDa Observed MW: 60 kDa Antigen affinity purification Recommended Dilutions: WB 1:500-1:1000

IHC 1:200-1:800 IF/ICC 1:50-1:500

Purification Method:

Applications

Tested Applications:

Isotype:

WB, IHC, IF/ICC, FC (Intra), ELISA

Cited Applications: WB, IHC, IF

Species Specificity: human, mouse, rat Cited Species: mouse

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: PC-3 cells, mouse liver tissue, DU 145 cells, LNCaP cells, VCaP cells, RAW 264.7 cells, MCF-7 cells, rat liver tissue

IHC: human liver tissue, mouse liver tissue, human breast cancer tissue

IF/ICC : MCF-7 cells,

Background Information

Microsomal flavin-containing monooxygenases (FMOs) [dimethylaniline monooxygenase (N-oxide forming) catalyze the FAD-, NADPH- and O2-dependent oxidation of a large number of structurally diverse compounds, including drugs, pesticides, and industrial chemicals containing a soft nucleophile(PMID:12488558). FMO5, which belongs to the FMO family, is a lesser component of human liver microsomes and is present at about one-third the level of FMO3. FMO5 protein is also present at very low levels in kidney, however, FMO5 exhibits a severely restricted substrate specificity for most drugs and other xenobiotics examined to date(PMID:10950857). It has 3 isoforms produced by alternative splicing.

Notable Publications

Author	Pubmed ID	Journal	Application
Yi-Xi Li	36335368	J Transl Med	IF
Flora Scott	28646079	Drug Metab Dispos	WB,IHC

Storage

Storage

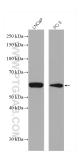
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

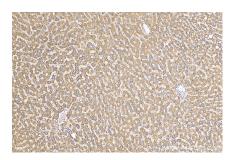
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

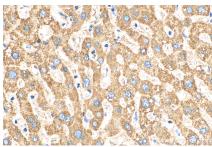
Selected Validation Data



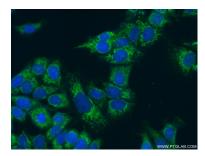
PC-3 cells and LNCap cells were subjected to SDS PAGE followed by western blot with 16864-1-AP (FMO5-specific antibody) at dilution of 1:800 incubated at room temperature for 1.5 hours.



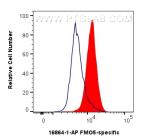
Immunohistochemical analysis of paraffinembedded human liver tissue slide using 16864-1-AP (FMO5-specific antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human liver tissue slide using 16864-1-AP (FMO5-specific antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed MCF-7 cells using 16864-1-AP (FMO5-specific antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



1x10^6 MCF-7 cells were intracellularly stained with 0.4 ug FMO5-specific Polyclonal antibody (16864-1-AP) and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (5A00013-2) (red), or 0.4 ug Rabbit IgG control Rabbit Polyab (30000-0-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).