

For Research Use Only

CYP1A2-Specific Polyclonal antibody, PBS Only

Catalog Number: 19936-1-PBS



Basic Information

Catalog Number:

19936-1-PBS

Size:

100ug, Concentration: 1 mg/ml by
Nanodrop;

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

NM_000761

GeneID (NCBI):

1544

UNIPROT ID:

P05177

Full Name:

cytochrome P450, family 1, subfamily
A, polypeptide 2

Calculated MW:

58 kDa

Observed MW:

58 kDa

Purification Method:

Antigen affinity purification

Applications

Tested Applications:

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

Species Specificity:

human, mouse, rat

Background Information

CYP1A2, also named as CP12; P3-450 and P450(PA), belongs to the cytochrome P450 family. Cytochromes P450 are a group of heme-thiolate monooxygenases. In liver microsomes, CYP1A2 is involved in an NADPH-dependent electron transport pathway. It oxidizes a variety of structurally unrelated compounds, including steroids, fatty acids, and xenobiotics. Most active of CYP1A2 is in catalyzing 2-hydroxylation. Caffeine is metabolized primarily by cytochrome CYP1A2 in the liver through an initial N3-demethylation. It also acts in the metabolism of aflatoxin B1 and acetaminophen. CYP1A2 participates in the bioactivation of carcinogenic aromatic and heterocyclic amines. It catalyzes the reaction: $RH + \text{reduced flavoprotein} + O_2 = ROH + \text{oxidized flavoprotein} + H_2O$. The antibody is specific to CYP1A2.

Storage

Storage:

Store at -80°C.

Storage Buffer:

PBS only, pH7.3

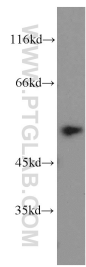
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free
in USA), or 1(312) 455-8498 (outside USA)

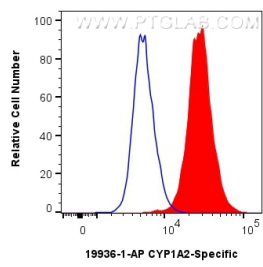
E: proteintech@ptglab.com
W: ptglab.com

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

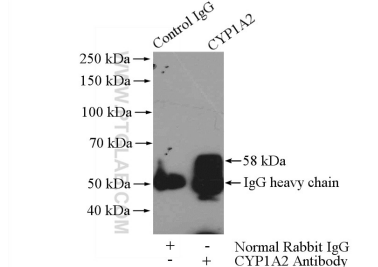
Selected Validation Data



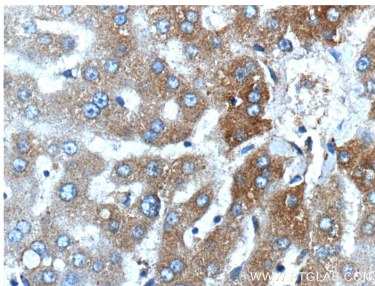
mouse liver tissue were subjected to SDS PAGE followed by western blot with 19936-1-AP (CYP1A2-Specific antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 19936-1-PBS in a different storage buffer formulation.



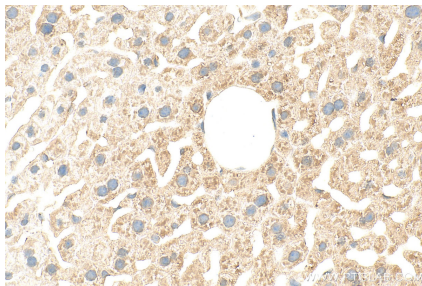
1x10⁶ HepG2 cells were intracellularly stained with 0.25 ug CYP1A2-Specific Polyclonal antibody (19936-1-AP) and Coralite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug rabbit IgG isotype control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer. This data was developed using the same antibody clone with 19936-1-PBS in a different storage buffer formulation.



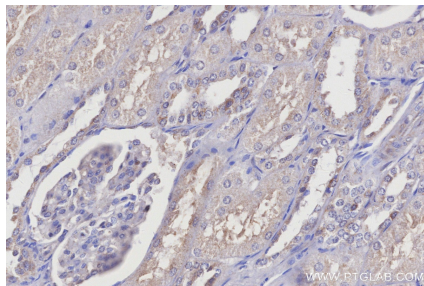
IP result of anti-CYP1A2-Specific (IP:19936-1-AP, 4ug; Detection:19936-1-AP 1:300) with mouse liver tissue lysate 4000ug. This data was developed using the same antibody clone with 19936-1-PBS in a different storage buffer formulation.



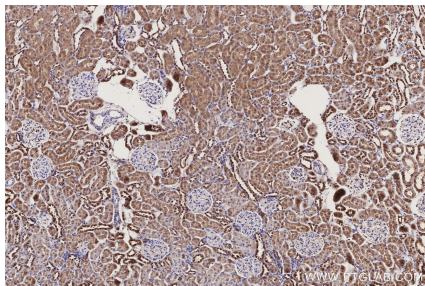
Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 19936-1-AP (CYP1A2-Specific Antibody) at dilution of 1:200 (under 40x lens). This data was developed using the same antibody clone with 19936-1-PBS in a different storage buffer formulation.



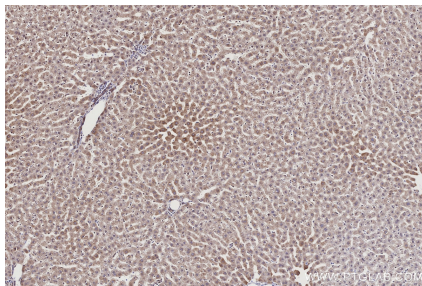
Immunohistochemical analysis of paraffin-embedded mouse liver tissue slide using 19936-1-AP (CYP1A2-Specific antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 19936-1-PBS in a different storage buffer formulation.



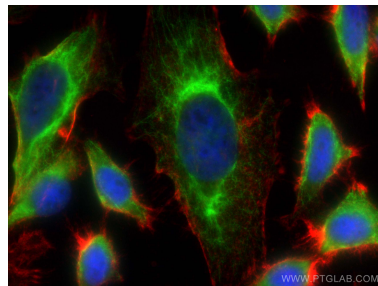
Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 19936-1-AP (CYP1A2-Specific antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 19936-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded rat kidney tissue slide using 19936-1-AP (CYP1A2-Specific antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 19936-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded rat liver tissue slide using 19936-1-AP (CYP1A2-Specific antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 19936-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using CYP1A2-Specific antibody (19936-1-AP) at dilution of 1:400 and Coralite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-phalloidin (red). This data was developed using the same antibody clone with 19936-1-PBS in a different storage buffer formulation.