

For Research Use Only

# CYP1A2-Specific Recombinant antibody

Catalog Number: 84751-1-RR



## Basic Information

<b>Catalog Number:</b> 84751-1-RR	<b>GenBank Accession Number:</b> NM_000761	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 1000 µg/ml	<b>GeneID (NCBI):</b> 1544	<b>CloneNo.:</b> 241922C4
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P05177	<b>Recommended Dilutions:</b> IHC 1:125-1:500
<b>Isotype:</b> IgG	<b>Full Name:</b> cytochrome P450, family 1, subfamily A, polypeptide 2	
	<b>Calculated MW:</b> 58 kDa	
	<b>Observed MW:</b> 58 kDa	

## Applications

### Tested Applications:

IHC, ELISA

### Species Specificity:

human, 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:

IHC : mouse liver tissue,

## 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 -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

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

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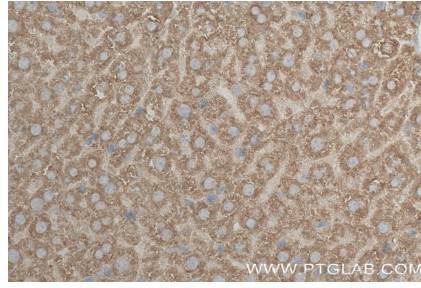
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## Selected Validation Data



Immunohistochemical analysis of paraffin-embedded mouse liver tissue slide using 84751-1-RR (CYP1A2-Specific antibody) at dilution of 1:250 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse liver tissue slide using 84751-1-RR (CYP1A2-Specific antibody) at dilution of 1:250 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).