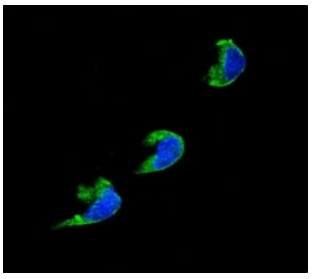
CYP1A2 Antibody (F41377)

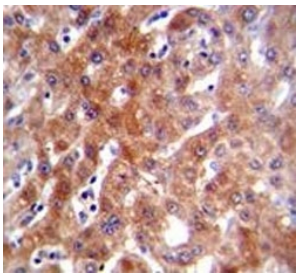
Catalog No.	Formulation	Size
F41377-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F41377-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

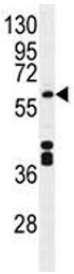
Availability	1-3 business days
Species Reactivity	Human, Mouse
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	P05177
Localization	Cytoplasmic, membrane
Applications	Western Blot : 1:1000 IHC (Paraffin) : 1:10-1:50 Immunofluorescence : 1:10-1:50
Limitations	This CYP1A2 antibody is available for research use only.



Confocal immunofluorescent analysis of CYP1A2 antibody with 293 cells followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). DAPI was used as a nuclear counterstain (blue).



CYP1A2 antibody immunohistochemistry analysis in formalin fixed and paraffin embedded human liver tissue.



CYP1A2 antibody western blot analysis in mouse liver tissue lysate. Predicted molecular weight ~58 kDa.

Description

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 in catalyzing 2-hydroxylation. Caffeine is metabolized primarily by cytochrome CYP1A2 in the liver through an initial N3-demethylation. Also acts in the metabolism of aflatoxin B1 and acetaminophen. Participates in the bioactivation of carcinogenic aromatic and heterocyclic amines. Catalizes the N-hydroxylation of heterocyclic amines and the O-deethylation of phenacetin. [UniProt]

Application Notes

Titration of the CYP1A2 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 255-282 from the human protein was used as the immunogen for this CYP1A2 antibody.

Storage

Aliquot the CYP1A2 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.