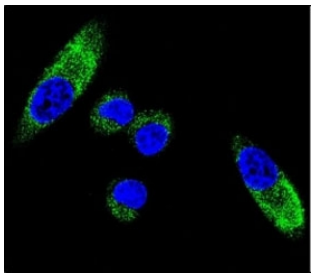
CYP1A1 Antibody (F50940)

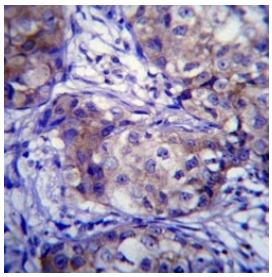
Catalog No.	Formulation	Size
F50940-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F50940-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

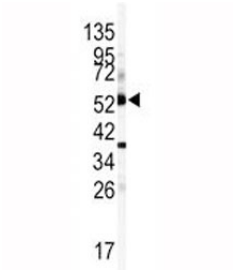
Availability	1-3 business days
Species Reactivity	Human, Mouse
Format	Purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Purified
UniProt	P04798
Localization	Cytoplasmic, membrane
Applications	Western blot: 1:1000 Immunofluorescence: 1:10-1:50 IHC (Paraffin): 1:10-1:50
Limitations	This CYP1A1 antibody is available for research use only.



CYP1A1 Antibody Human MDA-MB-231 IF. Confocal immunofluorescent analysis of MDA-MB-231 cells with CYP1A1 antibody demonstrated predominantly cytoplasmic staining (green), consistent with the localization of CYP1A1 as a heme-containing cytochrome P450 monooxygenase involved in Phase I xenobiotic metabolism. CYP1A1 is induced through aryl hydrocarbon receptor (AHR) signaling and catalyzes the oxidative metabolism of environmental toxicants, drugs, and endogenous substrates. Nuclei were counterstained with DAPI (blue). These results support the utility of CYP1A1 Antibody for studies of xenobiotic metabolism, AHR signaling, drug metabolism, environmental toxicology, and cancer biology.



CYP1A1 antibody immunohistochemistry analysis in formalin fixed and paraffin embedded human breast carcinoma.



Western blot analysis of CYP1A1 antibody and mouse lung tissue lysate. Predicted molecular weight ~58kDa.

Description

CYP1A1 is a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. This protein localizes to the endoplasmic reticulum and its expression is induced by some polycyclic aromatic hydrocarbons (PAHs), some of which are found in cigarette smoke. The enzyme's endogenous substrate is unknown; however, it is able to metabolize some PAHs to carcinogenic intermediates. CYP1A1 gene has been associated with lung cancer risk.

Explore our CYP1A1 Antibody / Xenobiotic Metabolism Enzyme Antibody page for additional information on CYP1A1 function in oxidative metabolism, detoxification, and metabolic adaptation.

Application Notes

Titration of the CYP1A1 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 252-280 from the human protein was used as the immunogen for this CYP1A1 antibody.

Storage

Aliquot the CYP1A1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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