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CYP2A13 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8649b

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q16696
Reactivity	Human
Predicted	Rat, Bovine, Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB16985
Calculated MW	56688
Antigen Region	446-477

Additional Information

Gene ID	1553
Other Names	Cytochrome P450 2A13, CYPIIA13, CYP2A13
Target/Specificity	This CYP2A13 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 446-477 amino acids from the C-terminal region of human CYP2A13.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CYP2A13 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CYP2A13
Function	Exhibits a coumarin 7-hydroxylase activity. Active in the metabolic activation of hexamethylphosphoramide, N,N-dimethylaniline, 2'-methoxyacetophenone, N-nitrosomethylphenylamine, and the tobacco-

	specific carcinogen, 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone. Possesses phenacetin O-deethylation activity.
Cellular Location	Endoplasmic reticulum membrane; Peripheral membrane protein. Microsome membrane; Peripheral membrane protein
Tissue Location	Expressed in liver and a number of extrahepatic tissues, including nasal mucosa, lung, trachea, brain, mammary gland, prostate, testis, and uterus, but not in heart, kidney, bone marrow, colon, small intestine, spleen, stomach, thymus, or skeletal muscle

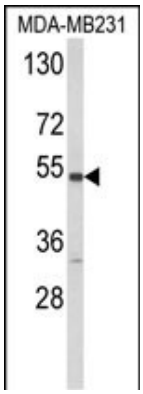
Background

CYP2A13 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. Although its endogenous substrate has not been determined, it is known to metabolize 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone, a major nitrosamine specific to tobacco.

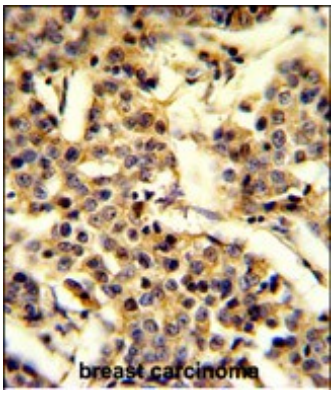
References

Smith,G., et.al., Xenobiotica 28 (12), 1129-1165 (1998)
Nelson,D.R., et.al., Pharmacogenetics 14 (1), 1-18 (2004)

Images

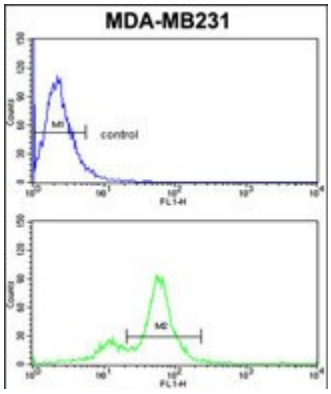


Western blot analysis of CYP2A13 Antibody (C-term) (Cat. #AP8649b) in MDA-MB231 cell line lysates (35ug/lane). CYP2A13 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human breast carcinoma reacted with HADHA Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

CYP2A13 Antibody (C-term) (Cat. #AP8649b) flow cytometric analysis of MDA-MB231 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.