

# CYP2A13 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP8649b

## Product Information

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<b>Application</b>	WB, IHC-P, FC, E
<b>Primary Accession</b>	<a href="#">Q16696</a>
<b>Reactivity</b>	Human
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Clone Names</b>	RB16985
<b>Calculated MW</b>	56688
<b>Antigen Region</b>	446-477

## Additional Information

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<b>Gene ID</b>	1553
<b>Other Names</b>	Cytochrome P450 2A13, CYP11A13, CYP2A13
<b>Target/Specificity</b>	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.
<b>Dilution</b>	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
<b>Format</b>	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.
<b>Storage</b>	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.
<b>Precautions</b>	CYP2A13 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	CYP2A13
<b>Function</b>	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

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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.

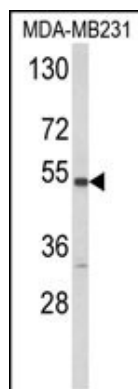
## References

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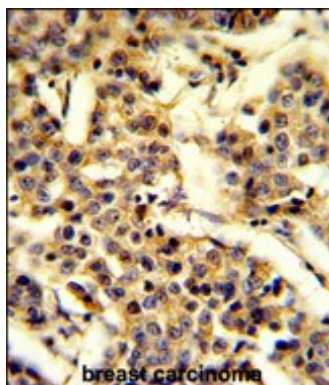
Smith,G., et.al., Xenobiotica 28 (12), 1129-1165 (1998)  
Nelson,D.R., et.al., Pharmacogenetics 14 (1), 1-18 (2004)

## Images

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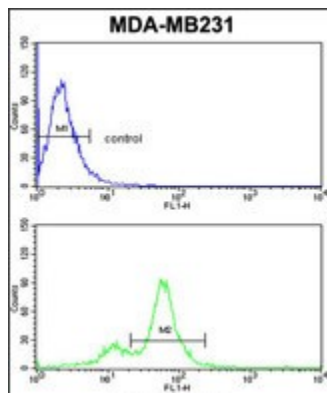


Western blot analysis of CYP2A13 Antibody (C-term) (Cat. #AP8649b) in MDA-MB231 cell line lysates (35ug/lane). CYP2A13 (arrow) was detected using the purified Pab.



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'.