

### CYP2A7 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP10477c

#### Specification

# CYP2A7 Antibody (Center) - Product Information

Application Primary Accession Other Accession

Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region FC, IHC-P, WB,E P20853 005556, 005555, P11509, P20852, P15392, P20812, NP\_085079.2 Human Rat, Mouse, Rabbit Rabbit Polyclonal Rabbit IgG 56425 121-148

### **CYP2A7** Antibody (Center) - Additional Information

Gene ID 1549

Other Names Cytochrome P450 2A7, CYPIIA7, Cytochrome P450 IIA4, CYP2A7

#### Target/Specificity

This CYP2A7 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 121-148 amino acids from the Central region of human CYP2A7.

Dilution FC~~1:10~50 IHC-P~~1:50~100 WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### 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

CYP2A7 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

# CYP2A7 Antibody (Center) - Protein Information



### Name CYP2A7

**Function** Cytochromes P450 are a group of heme-thiolate monooxygenases. In liver microsomes, this enzyme is involved in an NADPH-dependent electron transport pathway. It oxidizes a variety of structurally unrelated compounds, including steroids, fatty acids, and xenobiotics.

**Cellular Location** 

Endoplasmic reticulum membrane; Peripheral membrane protein. Microsome membrane; Peripheral membrane protein

# **CYP2A7 Antibody (Center) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### CYP2A7 Antibody (Center) - Images

MDA-MB231 95 72 55-4 36 -28 17

CYP2A7 Antibody (Center) (Cat. #AP10477c) western blot analysis in MDA-MB231 cell line lysates (35ug/lane). This demonstrates the CYP2A7 antibody detected the CYP2A7 protein (arrow).





CYP2A7 antibody (Center) (Cat. #AP10477c) immunohistochemistry analysis in formalin fixed and paraffin embedded human hepatocarcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the CYP2A7 antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



CYP2A7 Antibody (Center) (Cat. #AP10477c) flow cytometric analysis of MDA-MB231 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

# CYP2A7 Antibody (Center) - Background

CYP2A7 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; its substrate has not yet been determined. CYP2A7, which produces two transcript variants, is part of a large cluster of cytochrome P450 genes from the CYP2A, CYP2B and CYP2F subfamilies on chromosome 19q.

# CYP2A7 Antibody (Center) - References

Fukami, T., et al. Pharmacogenomics J. 6(6):401-412(2006) Nelson, D.R., et al. Pharmacogenetics 14(1):1-18(2004) Oscarson, M., et al. Hum. Mutat. 20(4):275-283(2002) Godoy, W., et al. Carcinogenesis 23(4):611-616(2002) Koskela, S., et al. Biochem. Pharmacol. 57(12):1407-1413(1999)