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CYP4Z1 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7886A

Product Information

Application	WB, E
Primary Accession	Q86W10
Other Accession	Q8N1L4
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB17072
Calculated MW	59086
Antigen Region	89-118

Additional Information

Gene ID	199974
Other Names	Cytochrome P450 4Z1, CYPIVZ1, CYP4Z1
Target/Specificity	This CYP4Z1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 89-118 amino acids from the N-terminal region of human CYP4Z1.
Dilution	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 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	CYP4Z1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CYP4Z1 {ECO:0000303|PubMed:19090726, ECO:0000312|HGNC:HGNC:20583}
Function	A cytochrome P450 monooxygenase that catalyzes the in-chain oxidation of fatty acids (PubMed:19090726, PubMed:29018033). Catalyzes the hydroxylation of carbon-hydrogen bonds. Hydroxylates lauric and myristic

	acids predominantly at the omega-4 and omega-2 positions, respectively (PubMed:19090726, PubMed:29018033). Catalyzes the epoxidation of double bonds of polyunsaturated fatty acids (PUFA). Displays an absolute stereoselectivity in the epoxidation of arachidonic acid producing the 14(S),15(R)-epoxyeicosatrienoic acid (EET) enantiomer (PubMed:29018033). Mechanistically, uses molecular oxygen inserting one oxygen atom into a substrate, and reducing the second into a water molecule, with two electrons provided by NADPH via cytochrome P450 reductase (CPR; NADPH-ferrihemoprotein reductase) (PubMed:19090726, PubMed:29018033).
Cellular Location	Endoplasmic reticulum membrane; Single-pass type II membrane protein. Microsome membrane; Single-pass type II membrane protein
Tissue Location	Preferentially detected in breast carcinoma tissue and mammary gland, whereas only marginal expression is found in all other tested tissues.

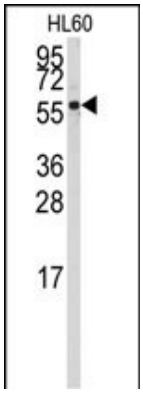
Background

CYP4Z1 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.

References

Savas,U., Arch. Biochem. Biophys. 436 (2), 377-385 (2005)
Rieger,M.A., Cancer Res. 64 (7), 2357-2364 (2004)

Images



Western blot analysis of anti-CYP4Z1 Antibody (N-term)(Cat.#AP7886a) in HL60 cell line lysates (35ug/lane).CYP4Z1(arrow) was detected using the purified Pab.

Citations

- The 3'UTR of the pseudogene CYP4Z2P promotes tumor angiogenesis in breast cancer by acting as a ceRNA for CYP4Z1.

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