

CYP4Z1 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7886A

Specification

CYP4Z1 Antibody (N-term) - Product Information

Application WB.E **Primary Accession** Q86W10 Other Accession **08N1L4** Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 59086 Antigen Region 89-118

CYP4Z1 Antibody (N-term) - 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

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.

CYP4Z1 Antibody (N-term) - 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

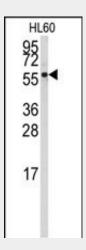
Preferentially detected in breast carcinoma tissue and mammary gland, whereas only marginal expression is found in all other tested tissues.

CYP4Z1 Antibody (N-term) - Protocols

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

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

CYP4Z1 Antibody (N-term) - Images

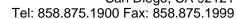


Western blot analysis of anti-CYP4Z1 Antibody (N-term)(Cat.#AP7886a) in HL60 cell line lysates (35ug/lane).CYP4Z1(arrow) was detected using the purified Pab.

CYP4Z1 Antibody (N-term) - 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.







CYP4Z1 Antibody (N-term) - References

Savas, U., Arch. Biochem. Biophys. 436 (2), 377-385 (2005) Rieger, M.A., Cancer Res. 64 (7), 2357-2364 (2004) CYP4Z1 Antibody (N-term) - Citations

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