

CYP21A2 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7880a

Specification

CYP21A2 Antibody (N-term) - Product Information

Application WB,E **Primary Accession** P08686 Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 56001 Antigen Region 59-87

CYP21A2 Antibody (N-term) - Additional Information

Gene ID 1589

Other Names

Steroid 21-hydroxylase, 21-OHase, Cytochrome P-450c21, Cytochrome P450 21, Cytochrome P450 XXI, Cytochrome P450-C21, Cytochrome P450-C21B, CYP21A2, CYP21B

Target/Specificity

This CYP21A2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 59-87 amino acids from the N-terminal region of human CYP21A2.

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

CYP21A2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CYP21A2 Antibody (N-term) - Protein Information

Name CYP21A2

Synonyms CYP21, CYP21B



Function A cytochrome P450 monooxygenase that plays a major role in adrenal steroidogenesis. Catalyzes the hydroxylation at C-21 of progesterone and 17alpha-hydroxyprogesterone to respectively form 11- deoxycorticosterone and 11-deoxycortisol, intermediate metabolites in the biosynthetic pathway of mineralocorticoids and glucocorticoids (PubMed:10602386, PubMed:16984992, PubMed:22014889, PubMed:25855791, PubMed:27721825). 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:25855791).

Cellular Location

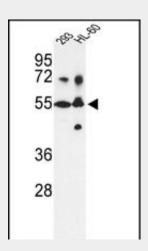
Endoplasmic reticulum membrane; Peripheral membrane protein. Microsome membrane; Peripheral membrane protein

CYP21A2 Antibody (N-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

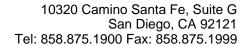
CYP21A2 Antibody (N-term) - Images



Western blot analysis of CYP21A2 Antibody (N-term) (Cat.#AP7880a) in 293, HL-60 cell line lysates (35ug/lane). CYP21A2 (arrow) was detected using the purified Pab.

CYP21A2 Antibody (N-term) - Background

CYP21A2 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 and hydroxylates steroids at the 21 position. Its activity is required for the synthesis of steroid hormones including cortisol and aldosterone. Mutations in CYP21A2 gene cause congenital adrenal hyperplasia.





CYP21A2 Antibody (N-term) - References

Guerra-Junior, G., Clin. Exp. Immunol. 155 (2), 182-188 (2009) Abid, F., Clin. Chem. Lab. Med. 46 (12), 1707-1713 (2008) Nelson, D.R., Pharmacogenetics 14 (1), 1-18 (2004)