Product name:	CYP11B1/2 Rabbit Polyclonal Antibody
Cat number:	ABN09625
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	Synthesized peptide derived from the C-terminal region of human CYP11B1/2.
Reactivity:	Human
Applications:	WB 1:500-1:2000,ELISA 1:20000-1:40000
Molecular Weight:	57kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

cytochrome P450 family 11 subfamily B member 1(CYP11B1) Homo sapiens This gene encodes 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 mitochondrial inner membrane and is involved in the conversion of progesterone to cortisol in the adrenal cortex. Mutations in this gene cause congenital adrenal hyperplasia due to 11-beta-hydroxylase deficiency. Transcript variants encoding different isoforms have been noted for this gene. [provided by RefSeq, Jul 2008],catalytic activity:A steroid + reduced adrenal ferredoxin + O(2) = an 11-beta-hydroxysteroid + oxidized adrenal ferredoxin + H(2)O.,cofactor:Heme group.,disease:An anti-Lepore-type fusion of the CYP11B1 and CYP11B2 genes is a cause of glucocorticoid-remediable aldosteronism (GRA) [MIM:103900].,disease:Defects in CYP11B1 are the cause of adrenal hyperplasia type 4 (AH4) [MIM:202010]. AH4 is a form of congenital adrenal hyperplasia, a common recessive disease due to defective synthesis of cortisol. Congenital adrenal hyperplasia is characterized by androgen excess leading to ambiguous genitalia in affected females, rapid somatic growth during childhood in both sexes with premature closure of the epiphyses and short adult stature. Four clinical types: "salt wasting" (SW, the most severe type), "simple virilizing" (SV, less severely affected patients), with normal aldosterone biosynthesis, "non-classic form" or late onset (NC or LOAH), and "cryptic" (asymptomatic). AH4 patients usually have hypertension.,function:Has steroid 11-beta-hydroxylase activity. In addition to this activity, the 18 or 19-hydroxylation of steroids and the aromatization of androstendione to estrone have also been ascribed to cytochrome P450 XIB.,similarity:Belongs to the cytochrome P450 family.,