

Rabbit CYP11B1/C11B2/CYP11B2 Polyclonal Antibody | anti-CYP11B1/2 antibody

Anti-CYP11B1/C11B2/CYP11B2 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125703	Rabbit	Human, Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Western Blot

PRODUCT SYNONYMS

CYP11B1/C11B2/CYP11B2; Polyclonal Antibody; Anti-CYP11B1/C11B2/CYP11B2 Antibody; Cytochrome P450 11B1; mitochondrial; CYPXIB1; Cytochrome P-450c11; Cytochrome P450C11; Steroid 11-beta-hydroxylase; CYP11B1; S11BH; Cytochrome P450 11B2; Aldosterone synthase; ALDOS; Aldosterone-synthesizing enzyme; CYPXIB2 ;Corticosterone 18-monooxygenase; CYP11B2; Cytochrome P-450Aldo; Cytochrome P-450C18; Steroid 18-hydroxylase; cytochrome P450 family 11 subfamily B member 1/2; anti-CYP11B1/2 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for CYP11B1/C11B2/CYP11B2 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.01mg NaN3.
Applicable Applications for anti-CYP11B1/2 antibody	ELISA (Direct ELISA), FCM/FACS (Flow Cytometry), WB (Western Blot)
Immunogen	E Coli-derived human CYP11B1/C11B2/CYP11B2 recombinant protein (Position: M1-P491).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



FCM/FACS (Flow Cytometry)

Figure 2. Flow Cytometry analysis of 293T cells using anti-CYP11B1/C11B2/CYP11B2 antibody (AAA125703).Overlay histogram showing 293T cells stained with AAA125703 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-CYP11B1/C11B2/CYP11B2 Antibody (AAA125703,1μg/1x106 cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10μg/1x106 cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1μg/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



WB (Western Blot)

Figure 1. Western blot analysis of CYP11B1/C11B2/CYP11B2 using anti-CYP11B1/C11B2/CYP11B2 antibody (AAA125703).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.Lane 1: rat kidney tissue lysatesLane 2: mouse kidney tissue lysates.After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1. 5 hour at RT. The membrane was incubated with rabbit anti-CYP11B1/C11B2/CYP11B2 antigen affinity purified polyclonal antibody (Catalog # AAA125703) at 0. 5 μg/mL overnight at 4 degree C, then washed with TBS-0. 1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1. 5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for CYP11B1/C11B2/CYP11B2 at approximately 55KD. The expected band size for CYP11B1/C11B2/CYP11B2 is at 55KD.

ADDITIONAL INFORMATION

Related Product Information for anti-CYP11B1/2 antibody	CYP11B1 shows close homology to the CYP11B2 gene, which encodes aldosterone synthase and is normally expressed only in the zona glomerulosa. Both genes map to chromosome 8q21. 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.
References	1. Curnow, K. M., Slutsker, L., Vitek, J., Cole, T., Speiser, P. W., New, M. I., White, P. C., Pascoe, L. Mutations in the CYP11B1 gene causing congenital adrenal hyperplasia and hypertension cluster in exons 6, 7, and 8. Proc. Nat. Acad. Sci. 90: 4552-4556, 1993. 2. Clyne, C. D., Zhang, Y., Slutsker, L., Mathis, J. M., White, P. C., Rainey, W. E. Angiotensin II and potassium regulate human CYP11B2 transcription through common cis-elements. Molec. Endocr. 11: 638-649, 1997. 3. Ganapathipillai, S., Laval, G., Hoffman, I. S., Castejon, A. M., Nicod, J., Dick, B., Frey, F. J., Frey, B. M., Cubeddu, L. X., Ferrari, P. CYP11B2-CYP11B1 haplotypes associated with decreased 11-beta-hydroxylase activity. J. Clin. Endocr. Metab. 90: 1220-1225, 2005.

NCBI AND UNIPROT INFORMATION

NCBI GI #	215274267
NCBI GeneID	1584
UniProt Accession #	P15538; P19099
NCBI Official Full Name	Cytochrome P450 11B1, mitochondrial
NCBI Official Synonym Full Names	cytochrome P450, family 11, subfamily B, polypeptide 1
NCBI Official Symbol	CYP11B1
NCBI Official Synonym Symbols	FH1; CPN1; CYP11B; P450C11
NCBI Protein Information	cytochrome P450 11B1, mitochondrial; CYPXIB1; cytochrome P450C11; cytochrome P-450c11; cytochrome p450 XIB1; steroid 11-beta-hydroxylase; steroid 11-beta-monooxygenase; cytochrome P450, subfamily XIB (steroid 11-beta-hydroxylase), polypeptide 1
UniProt Protein Name	Cytochrome P450 11B1, mitochondrial
UniProt Gene Name	CYP11B1
UniProt Synonym Gene Names	S11BH; Cytochrome P450C11
UniProt Entry Name	C11B1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/cyp11b1-c11b2-cyp11b2-antibody-direct-elisa-flow-cytometry-western-blot-elisa/125703>