



Rabbit Anti-Cytochrome P450 17A1 antibody

SL3853R

Product Name:	Cytochrome P450 17A1
Chinese Name:	细胞色素P450 17抗体
Alias:	CPT7; CYP17; CYP17A1; Cytochrome P450 17A1; CYPXVII; Cytochrome P450 family 17; Cytochrome P450 family 17 subfamily A polypeptide 1; Cytochrome p450 XVIIA1; Cytochrome p450, subfamily XVII (steroid 17 alpha hydroxylase) adrenal hyperplasia ; P450 C17; P450c17; S17AH; Steroid 17 alpha hydroxylase/17,20 lyase; Steroid 17 alpha monooxygenase; CP17A HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Horse,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	57kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human CYP17:401-508/508
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Cytochrome P450 17A1 (CYP17A1) belongs to the cytochrome P450 family; it plays a role in the conversion of pregnenolone and progesterone into their 17-alpha-hydroxylated products and subsequently to dehydroepiandrosterone (DHEA) and

androstenedione. CYP17A1 also catalyzes both the 17-alpha-hydroxylation and the 17,20-lyase reaction. CYP17A1 is involved in sexual development during fetal life and at puberty. Defects in CYP17A1 are the cause of adrenal hyperplasia type 5 (AH5). AH5 is a form of congenital adrenal hyperplasia, a common recessive disease due to defective synthesis of cortisol.

Function:

Conversion of pregnenolone and progesterone to their 17-alpha-hydroxylated products and subsequently to dehydroepiandrosterone (DHEA) and androstenedione. Catalyzes both the 17-alpha-hydroxylation and the 17,20-lyase reaction. Involved in sexual development during fetal life and at puberty.

Subcellular Location:

Membrane.

Post-translational modifications:

Phosphorylation is necessary for 17,20-lyase, but not for 17-alpha-hydroxylase activity.

DISEASE:

Defects in CYP17A1 are the cause of adrenal hyperplasia type 5 (AH5) [MIM:202110]. AH5 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).

Similarity:

Belongs to the cytochrome P450 family.

SWISS:

P05093

Gene ID:

1586

Database links:

[Entrez Gene: 493967](#) Cat

[Entrez Gene: 477807](#) Dog

[Entrez Gene: 101831170](#) Hamster

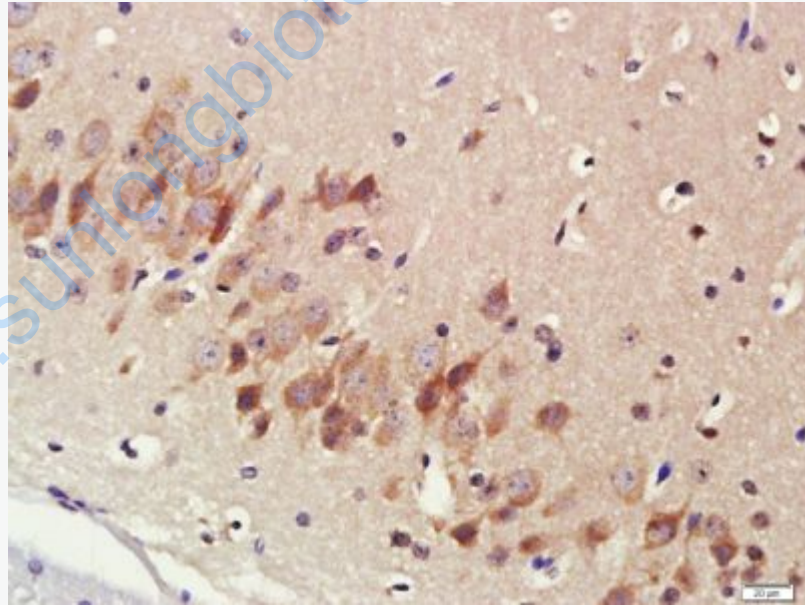
[Entrez Gene: 1586](#) Human

[Omin: 609300](#) Human
[SwissProt: Q9GMC8](#) Cat
[SwissProt: Q8HYN1](#) Chimpanzee
[SwissProt: P70687](#) Hamster
[SwissProt: Q95328](#) Horse
[SwissProt: P05093](#) Human
[Unigene: 438016](#) Human

Important Note:

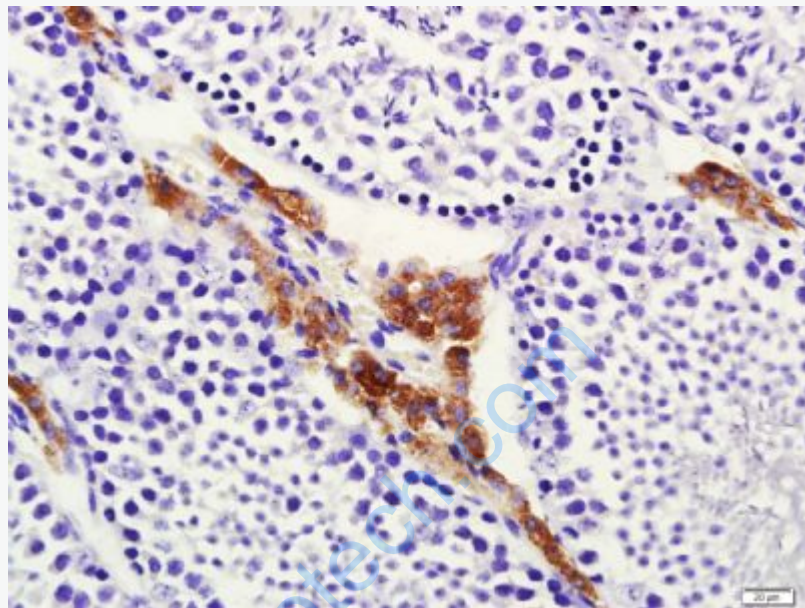
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Picture:

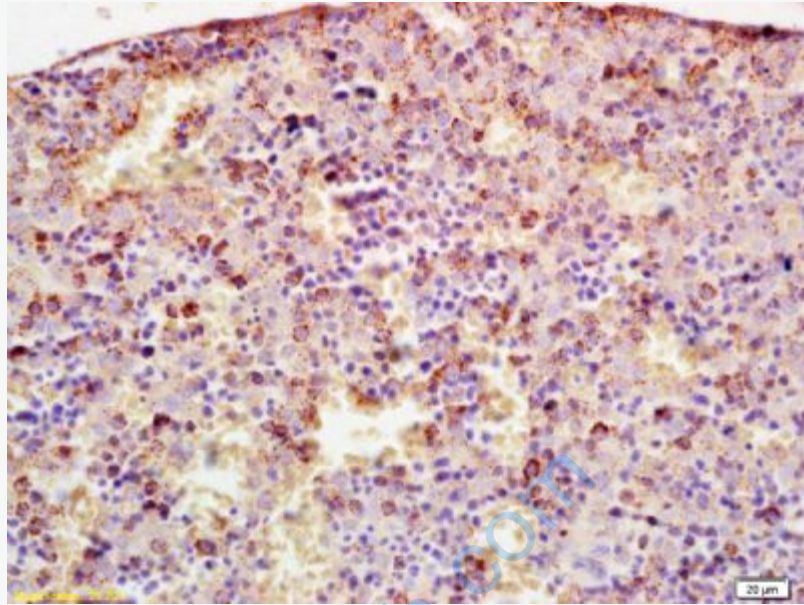


Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CYP17) Polyclonal Antibody, Unconjugated (SL3853R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023)

for 20 minutes and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Mouse testis); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CYP17) Polyclonal Antibody, Unconjugated (SL3853R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Tissue/cell: mouse embryo tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-CYP17 Polyclonal Antibody, Unconjugated(SL3853R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining