

Basic Information

Product Name	Anti-CYP11A1 Antibody	
Gene Name	CYP11A1	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human	
Tested Application	WB, IHC	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human CYP11A1.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	50-60 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 (Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied.

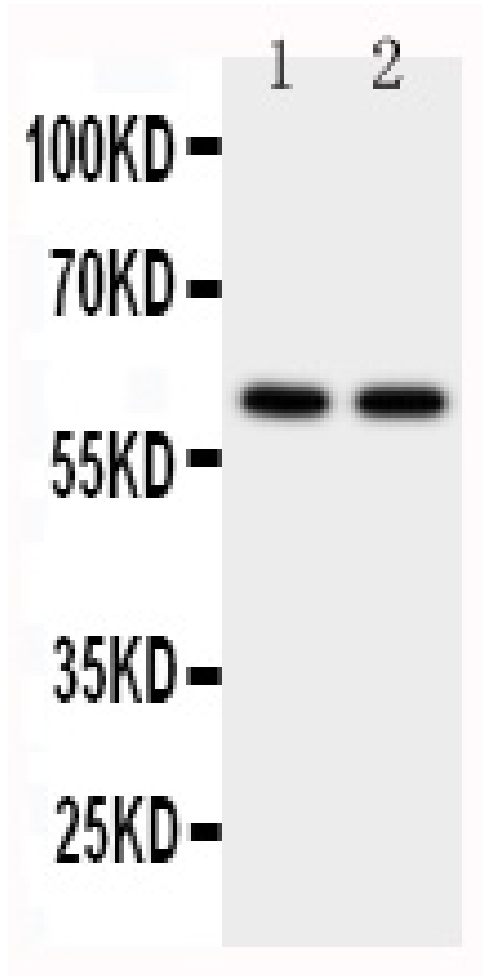
Background Information

CYP11A1 (Cytochrome p450, family 11, subfamily A, polypeptide 1), also called CYTOCHROME P450SCC, CYTOCHROME P450C11A1 or CYP11A, is a mitochondrial enzyme associated with the conversion of cholesterol to pregnenolone. CYP11A1 is a member of the cytochrome P450 superfamily of enzymes. The CYP11A1 gene is mapped on 15q24.1. Expression of the CYP11A1 gene may play a role in skin physiology and pathology and that cutaneous proopiomelanocortin activity may be autoregulated by a feedback mechanism involving glucocorticoids synthesized locally by Slominski et al. Using in vitro studies, CYP11A1 catalyzed the side-chain cleavage of 7-dehydrocholesterol to form 7-dehydropregnenolone. In addition, CYP11A1 catalyzed the metabolism of biologically inert vitamin D₃, which is formed from 7-dehydrocholesterol, to form 2 hydroxylated products, 20-hydroxyvitamin D₃ and 20, 22-dihydroxyvitamin D₃. Mutations in the CYP11A1 gene cause congenital adrenal insufficiency with partial or complete 46, XY sex reversal.

Reference

Anti-CYP11A1 Antibody 被引用在4文献中。

Selected Validation Data

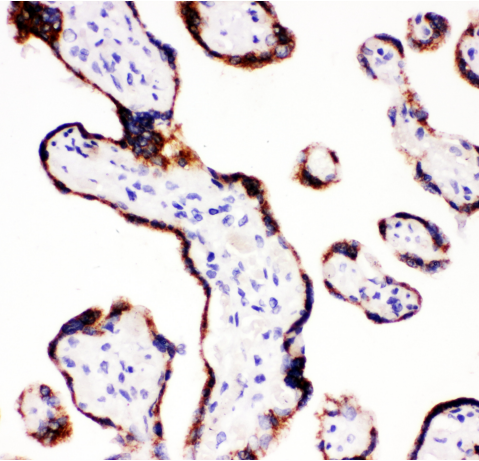


Western blot analysis of CYP11A1 using anti-CYP11A1 antibody (BA3699).

The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human placenta tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-CYP11A1 antigen affinity purified polyclonal antibody (BA3699) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for CYP11A1 at approximately 50-60 kDa. The expected band size for CYP11A1 is at 60 kDa.



IHC analysis of CYP11A1 using anti-CYP11A1 antibody (BA3699).

CYP11A1 was detected in a paraffin-embedded section of human placenta tissue. The tissue section was incubated with rabbit anti-CYP11A1 Antibody (BA3699) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.