

## Basic Information

Product Name	Anti-CYP17A1 Antibody	
Gene Name	CYP17A1	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, rat	
Tested Application	WB, IHC, FCM	
Contents	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human CYP17A1, different from the related mouse and rat sequences by ten amino acids.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	57 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Flow Cytometry (Fixed): 1:50-200 (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.	

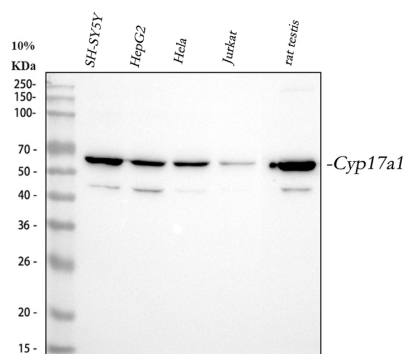
## Storage

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

## Background Information

Cytochrome P450 17A1, also called steroid 17 $\alpha$ -monooxygenase, is an enzyme of the hydroxylase type that in humans is encoded by the CYP17A1 gene on chromosome 10. 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 endoplasmic reticulum. It has both 17 $\alpha$ -hydroxylase and 17,20-lyase activities and is a key enzyme in the steroidogenic pathway that produces progestins, mineralocorticoids, glucocorticoids, androgens, and estrogens. Mutations in this gene are associated with isolated steroid-17  $\alpha$ -hydroxylase deficiency, 17- $\alpha$ -hydroxylase/17,20-lyase deficiency, pseudohermaphroditism, and adrenal hyperplasia.

## Selected Validation Data



Western blot analysis of CYP17A1 using anti-CYP17A1 antibody

(A00615-1). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human SH-SY5Y whole cell lysates,

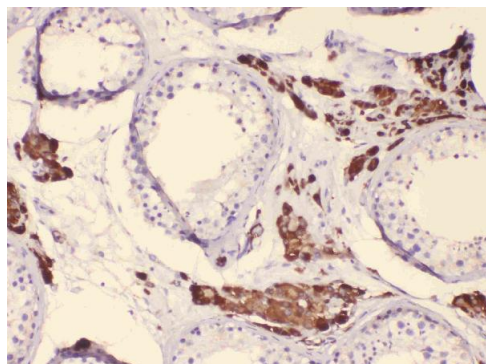
Lane 2: human HepG2 whole cell lysates,

Lane 3: human Hela whole cell lysates,

Lane 4: human Jurkat whole cell lysates,

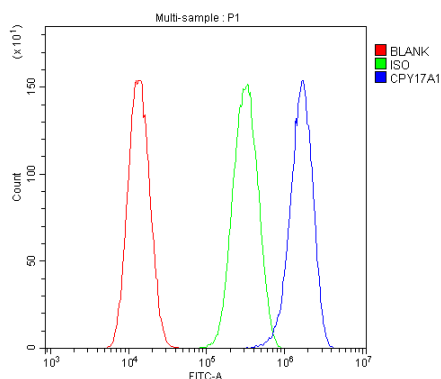
Lane 5: rat testis tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-CYP17A1 antigen affinity purified polyclonal antibody (A00615-1) 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 CYP17A1 at approximately 57 kDa. The expected band size for CYP17A1 is at 57 kDa.



IHC analysis of CYP17A1 using anti-CYP17A1 antibody (A00615-1).

CYP17A1 was detected in a paraffin-embedded section of human testis tissue. The tissue section was incubated with rabbit anti-CYP17A1 Antibody (A00615-1) 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.



Flow Cytometry analysis of U87 cells using anti-CYP17A1 antibody (A00615-1).

Overlay histogram showing U87 cells stained with A00615-1 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-CYP17A1 Antibody (A00615-1) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

Product datasheet

## Anti-CYP17A1 Antibody

Catalog Number: **A00615-1**



antibody and ELISA experts

**BOSTER BIOLOGICAL TECHNOLOGY**

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