

Basic Information

Product Name	Anti-CYP19A1 Antibody	
Gene Name	CYP19A1	
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 Aromatase.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	58 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.	

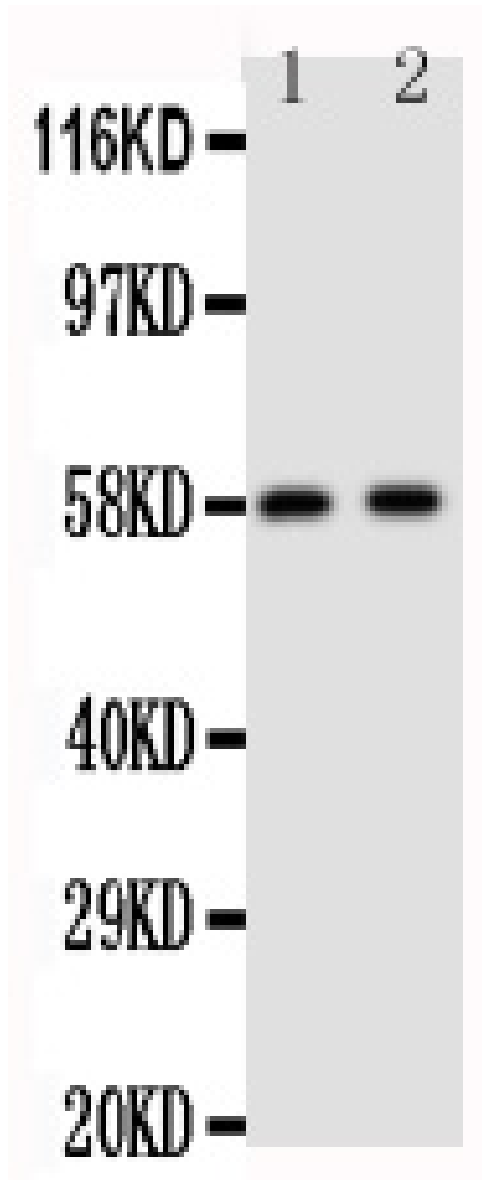
Storage

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

Background Information

Aromatase is an enzyme responsible for a key step in the biosynthesis of estrogens. It is a member of the cytochrome P450 superfamily, which are monooxygenases that catalyze many reactions involved in steroidogenesis. In particular, aromatase is responsible for the aromatization of androgens into estrogens. The CYP19 gene spans at least 70 kb of genomic DNA and contains 10 exons. By in situ hybridization, the ARO gene is mapped to 15q21.1. The aromatase enzyme can be found in many tissues including gonads, brain, adipose tissue, placenta, blood vessels, skin, bone, and endometrium, as well as in tissue of endometriosis, uterine fibroids, breast cancer, and endometrial cancer. It is an important factor in sexual development. Some bodybuilders taking steroids also take antiaromatase supplements to prevent excess testosterone conversion into estrogens, which can cause gynecomastia.

Selected Validation Data

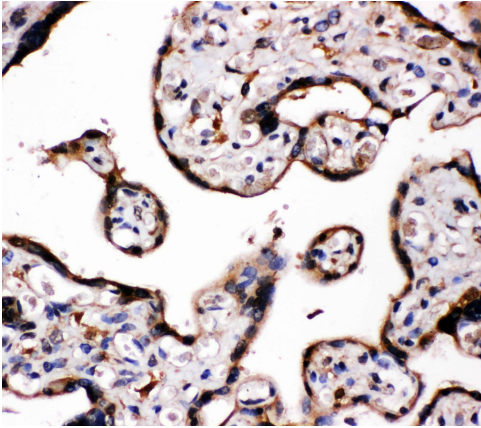


Western blot analysis of CYP19A1 using anti-CYP19A1 antibody (PA1489). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: Human Placenta tissue lysates,

Lane 2: Human Placenta tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-CYP19A1 antigen affinity purified polyclonal antibody (PA1489) 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 CYP19A1 at approximately 58 kDa. The expected band size for CYP19A1 is at 58 kDa.



IHC analysis of CYP19A1 using anti-CYP19A1 antibody (PA1489).

CYP19A1 was detected in a paraffin-embedded section of human placenta tissue. The tissue section was incubated with rabbit anti-CYP19A1 Antibody (PA1489) 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.