

CYP19A1 Polyclonal Antibody

Catalog No :	YT1190
Reactivity :	Human;Mouse;Rat
Applications :	WB;IHC;IF;ELISA
Target :	CYP19A1
Fields :	>>Steroid hormone biosynthesis;>>Metabolic pathways;>>Ovarian steroidogenesis
Gene Name :	CYP19A1
Protein Name :	Cytochrome P450 19A1
Human Gene Id :	1588
Human Swiss Prot No :	P11511
Mouse Gene Id :	13075
Mouse Swiss Prot No :	P28649
Rat Swiss Prot No :	P22443
Immunogen :	The antiserum was produced against synthesized peptide derived from human Cytochrome P450 19A1. AA range:221-270
Specificity :	CYP19A1 Polyclonal Antibody detects endogenous levels of CYP19A1 protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:20000. Not yet tested in other applications.
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration : 1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band : 53kD

Cell Pathway : Steroid hormone biosynthesis;Androgen and estrogen metabolism;

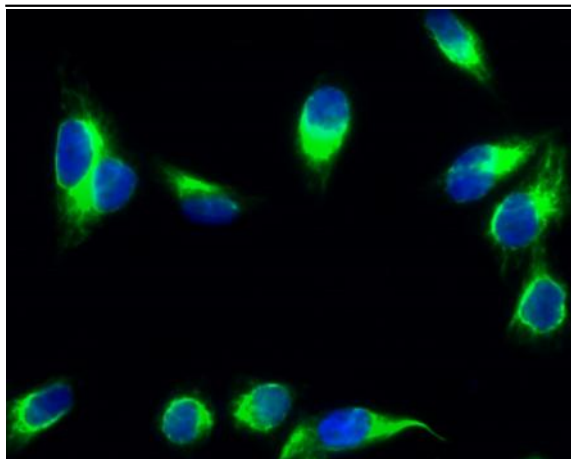
Background : cytochrome P450 family 19 subfamily A member 1(CYP19A1) Homo sapiens
This gene encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. This protein localizes to the endoplasmic reticulum and catalyzes the last steps of estrogen biosynthesis. Mutations in this gene can result in either increased or decreased aromatase activity; the associated phenotypes suggest that estrogen functions both as a sex steroid hormone and in growth or differentiation. Alternative splicing results in multiple transcript variants. [provided by RefSeq, May 2014],

Function : catalytic activity:RH + reduced flavoprotein + O(2) = ROH + oxidized flavoprotein + H(2)O.,cofactor:Heme group.,disease:Defects in CYP19A1 are a cause of familial gynecomastia [MIM:139300]. This is characterized by an estrogen excess due to an increased aromatase activity.,disease:Defects in CYP19A1 are the cause of aromatase deficiency (AROD) [MIM:107910]. AROD is a rare disease in which fetal androgens are not converted into estrogens due to placental aromatase deficiency. Thus, pregnant women exhibit a hirsutism, which spontaneously resolves after post-partum. At birth, female babies present with pseudohermaphroditism due to virilization of extern genital organs. In adult females, manifestations include delay of puberty, breast hypoplasia and primary amenorrhoea with multicystic ovaries.,function:Catalyzes the formation of aromatic C18 estrogens from C19 androgens.,online information:

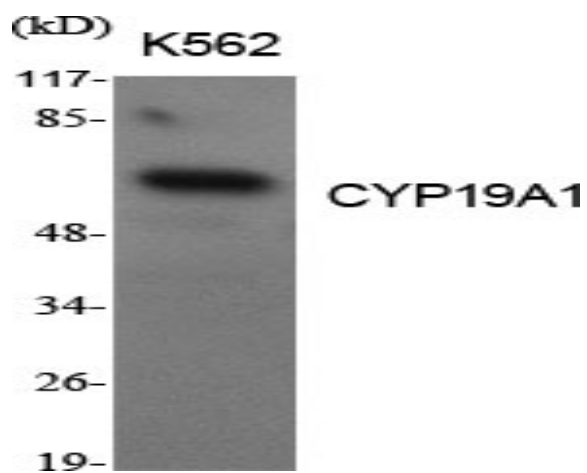
Subcellular Location : Endoplasmic reticulum membrane ; Multi-pass membrane protein . Microsome membrane ; Multi-pass membrane protein .

Expression : Widely expressed, including in adult and fetal brain, placenta, skin fibroblasts, adipose tissue and gonads.

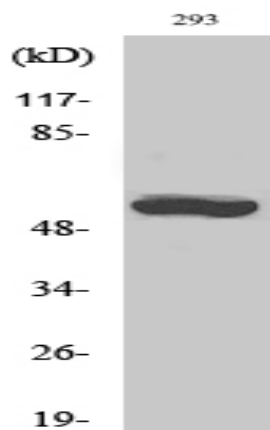
Products Images



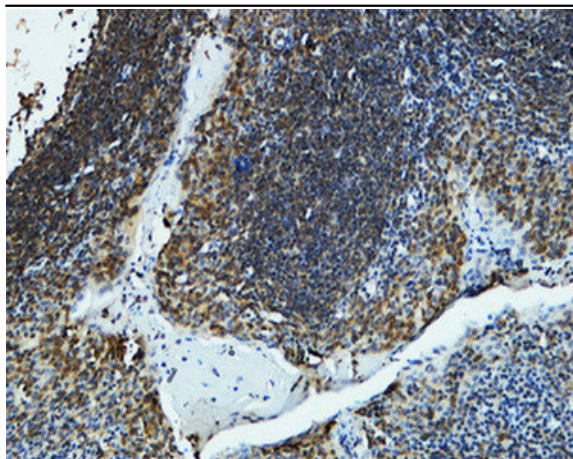
Immunofluorescence analysis of HeLa cell. 1, CYP19A1 Polyclonal Antibody (green) was diluted at 1:200 (4 ° overnight). 2, Goat Anti Rabbit Alexa Fluor 488 Catalog:RS3211 was diluted at 1:1000 (room temperature, 50min). 3 DAPI (blue) 10min.



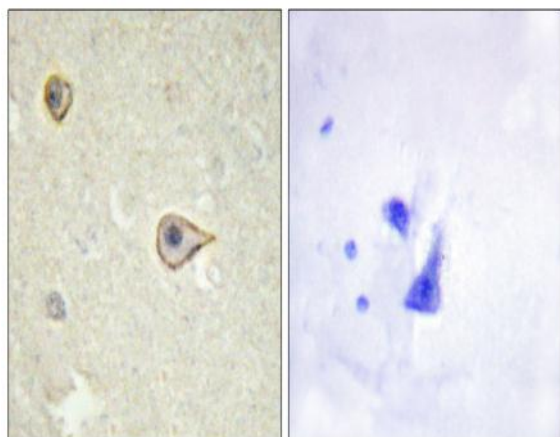
Western Blot analysis of various cells using CYP19A1 Polyclonal Antibody diluted at 1:1000



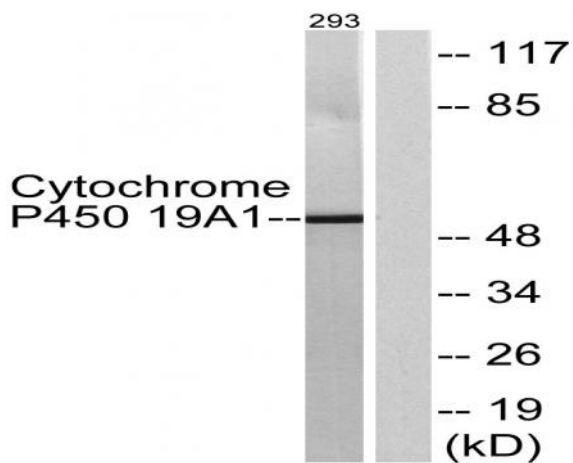
Western Blot analysis of 293 cells using CYP19A1 Polyclonal Antibody diluted at 1:1000



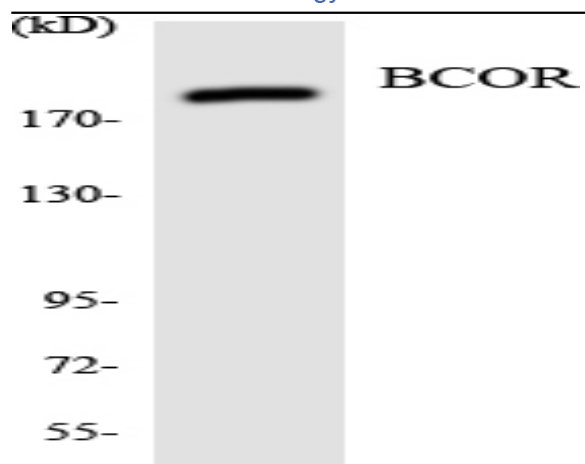
Immunohistochemical analysis of paraffin-embedded Human Amygdala. 1, Antibody was diluted at 1:100(4° overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3, Secondary antibody was diluted at 1:200(room temperature, 30min).



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using Cytochrome P450 19A1 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from 293 cells, using Cytochrome P450 19A1 Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from HeLa cells using BCOR antibody.