



CYP19A1 Polyclonal Antibody

Catalog No	YP-Ab-02562
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	CYP19A1
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
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	ARO;ARO1;Aromatase;CPV1;CYAR;CYP19A1;Cytochrome P450 19A1;CYP19;CYPXIX;Cytochrome P-450AROM;Estrogen synthase
Observed Band	53kD
Calculated Molecular Weight	53kD
Cell Pathway	Endoplasmic reticulum membrane ; Multi-pass membrane protein . Microsome membrane ; Multi-pass membrane protein .
Tissue Specificity	Widely expressed, including in adult and fetal brain, placenta, skin fibroblasts, adipose tissue and gonads.
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:

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],

matters needing attention

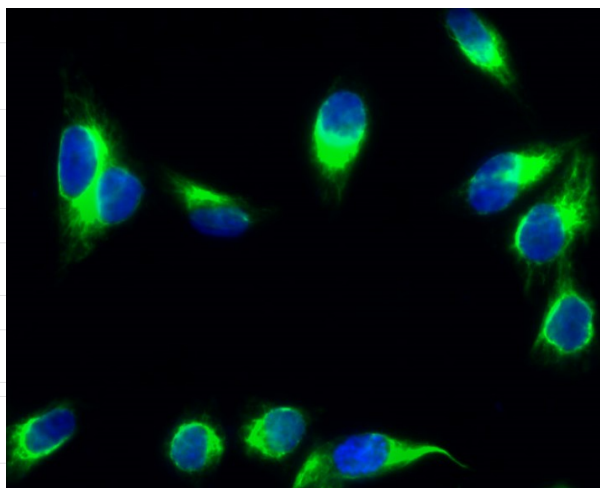
Avoid repeated freezing and thawing!

Usage suggestions

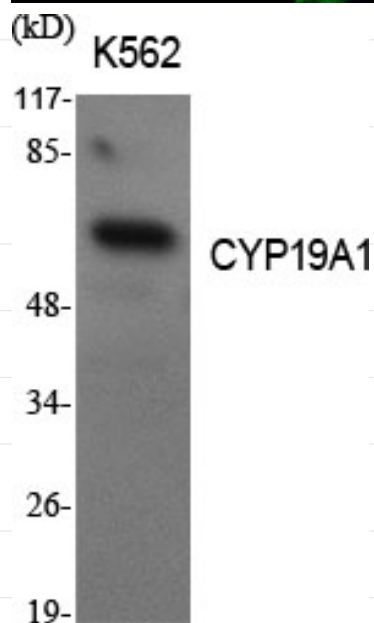
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



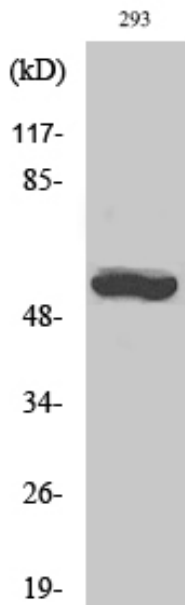
Products Images



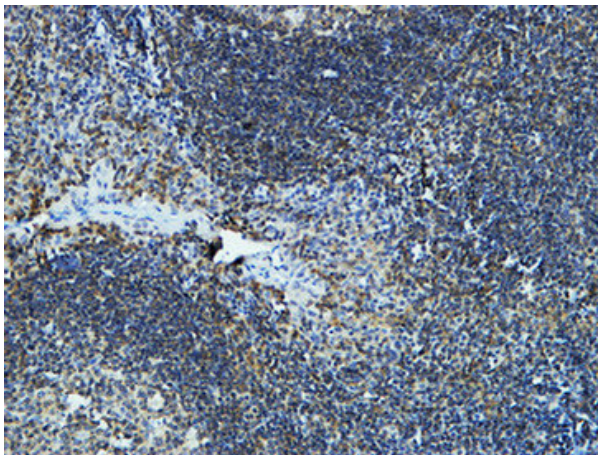
Immunofluorescence analysis of HeLa cell. 1,CYP19A1 Polyclonal Antibody(green) was diluted at 1:200(4° overnight). 2, Goat Anti Rabbit Alexa Fluor 488 Catalog:RS3211 was diluted at 1:1000(room temperature, 50min). 3 DAPI(blue) 10min.



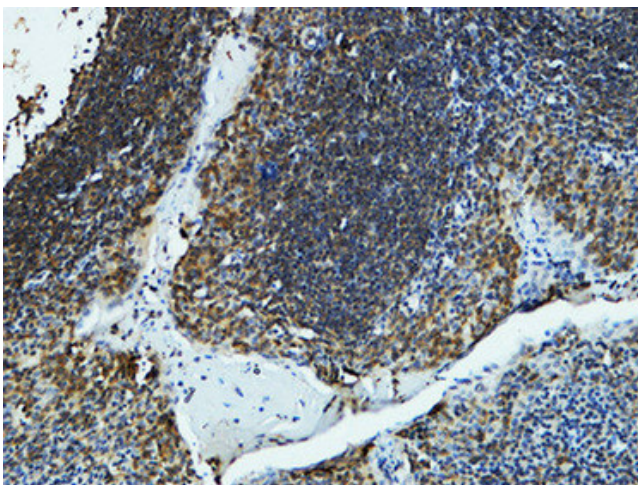
Western Blot analysis of various cells using CYP19A1 Polyclonal Antibody diluted at 1:1000



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).



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).