



CYP19A1 Polyclonal Antibody

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|---------------------------|--|
| Catalog No | YP-Ab-02562 |
| Isotype | IgG |
| Reactivity | Human;Mouse;Rat |
| Applications | WB;IHC;IF;ELISA |
| Gene Name | CYP19A1 |
| Protein Name | Cytochrome P450 19A1 |
| 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 | CYP19A1; ARO1; CYAR; CYP19; Cytochrome P450 19A1; Aromatase; CYPXIX; Cytochrome P-450AROM; Estrogen synthase |
| Observed Band | 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],

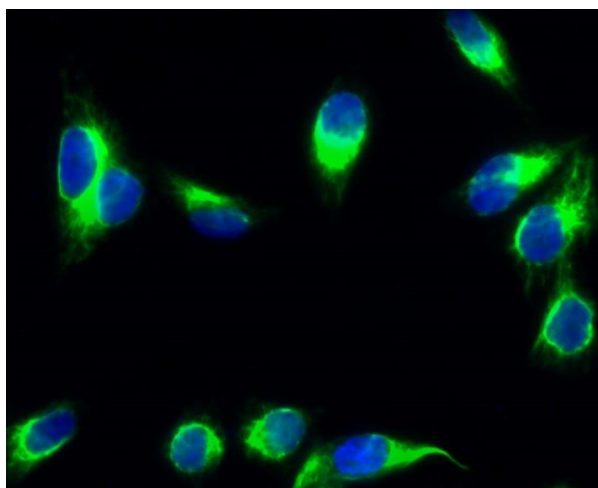
matters needing attention

Avoid repeated freezing and thawing!

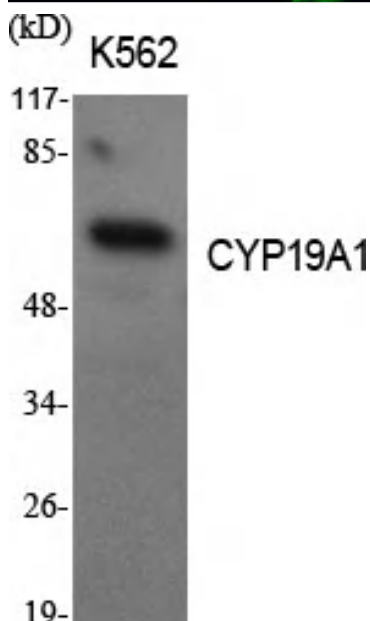
Usage suggestions

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

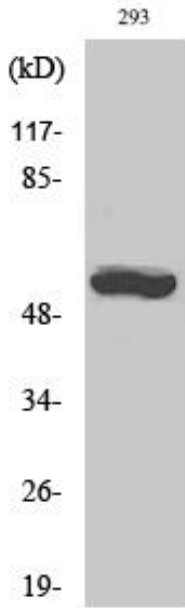
Products Images



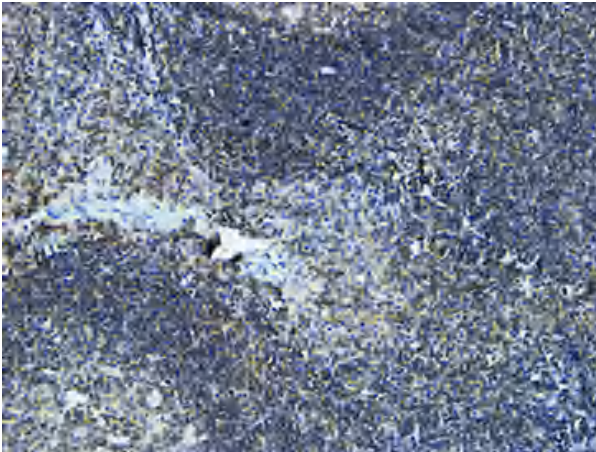
Immunofluorescence analysis of HeLa cell. 1,CYP19A1 Polyclonal Antibody(green) was diluted at 1:200(4° overnight). 2, Goat Anti Rabbit Alexa Fluor 488 Catalog:RS3211 was diluted at 1:1000(room temperature, 50min). 3 DAPI(blue) 10min.



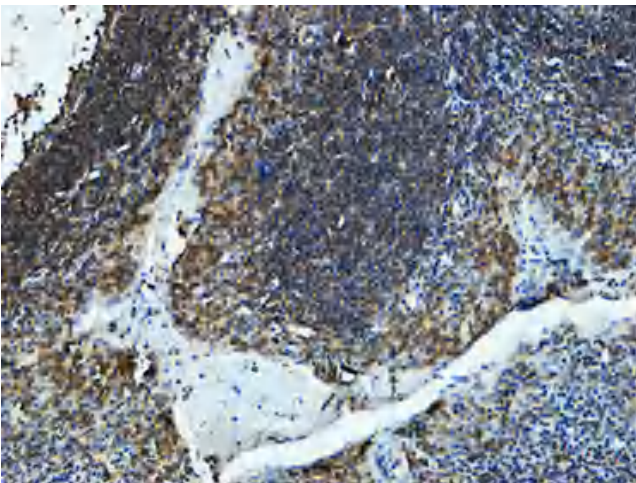
Western Blot analysis of various cells using CYP19A1 Polyclonal Antibody diluted at 1:1000



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).