

Rabbit Anti-CYP19/AF350 Conjugated antibody

SL1292R-AF350

Product Name	Anti-CYP19/AF350
Chinese Name	AF350 标记的细胞色素 P450 19 抗体
Alias	ARO 1; ARO; ARO1; ARO1; Aromatase; CP19A_HUMAN; CPV; CPV1; CYAR; CYP19; CYP19A1; CYPXIX; Cytochrome P-450AROM; Cytochrome P450 19A1; Cytochrome P450 family 19 subfamily A polypeptide 1; Cytochrome P450, family 19, subfamily A, polypeptide 1; Cytochrome P450, subfamily XIX (aromatization of androgens); Estrogen synthase; Estrogen synthetase; Flavoprotein linked monooxygenase; MGC104309; Microsomal monooxygenase; OTTHUMP00000162543; OTTHUMP00000198350; P 450AROM; P450AROM.
Research Area	Tumour Cell biology
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human,Rat(predicted:Mouse,Dog,Pig,Cow,Horse,Rabbit,Sheep) IF=1:100-500
Applications	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	58kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human CYP19
Lsotype	IgG
Purification	affinity purified by Protein A
Storage Buffer	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

background:

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, three successive hydroxylations of the A ring of androgens. 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. The gene expresses two transcript variants. Belongs to the cytochrome P450 family.

Function:

Catalyzes the formation of aromatic C18 estrogens from C19 androgens.

Subcellular Location:

Membrane; Peripheral membrane protein.

Tissue Specificity:

Brain, placenta and gonads.

Product Detail

DISEASE:

Defects in CYP19A1 are a cause of aromatase excess syndrome (AEXS) [MIM:139300]; also known as familial gynecomastia. AEXS is characterized by an estrogen excess due to an increased aromatase activity.

Defects in CYP19A1 are the cause of aromatase deficiency (AROD) [MIM:613546]. 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.

Similarity:

Belongs to the cytochrome P450 family.

Database links:

[Entrez Gene: 1588](#) Human

[Entrez Gene: 13075](#) Mouse

[Entrez Gene: 25147](#) Rat

[Omim: 107910](#) Human

[SwissProt: P11511](#) Human

[SwissProt: P28649](#) Mouse

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

芳香化酶基因(CYP19)编码的芳香化酶是催化雄激素向雌激素转化的关键酶,CYP19 的变异可使芳香化酶活性改变,导致雌激素水平的改变,从而使乳腺癌易感性发生改变,也可能影响到乳腺癌内分泌治疗的敏感性。目前关于 CYP19 基因多态性与乳腺癌之间的关系仍存在争论,尚需深入研究以明确芳香化酶的基因多态性在乳腺癌发生中的作用,以及该基因多态性对芳香化酶功能的影响。