SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

[Marker Primary Antibody]

Rabbit Anti-CYP19/AF647 Conjugated antibody

Catalog Number: SL1292R-AF647

FOR RESEARCH USE ONLY

[DATASHEET]

Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Target:	Anti-CYP19/AF647
Immunogen:	KLH conjugated synthetic peptide derived from human CYP19
Purification:	affinity purified by Protein A
Concentration:	1mg/ml
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.
Applications:	IF=1:100-500 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Reactivity:	Human,Rat(predicted:Mouse,Dog,Pig,Cow,Horse,Rabbit,Sheep)
Background:	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. DISEASE: Defects in CYP19A1 are a cause of aromatase excess syndrome

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

	(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. Aromatase, encoded by the aromatase gene (CYP19), is the key enzyme catalyzing the conversion of androgens to estrogens,CYP19Variations in the gene can alter aromatase activity, leading to changes in estrogen levels, thereby altering breast cancer susceptibility and possibly also affecting the sensitivity to endocrine therapy for breast cancer。 At present, controversy still exists regarding the relationship between CYP19 gene polymorphisms and breast cancer,Further in-depth studies are needed to clarify the role of aromatase gene polymorphisms in the development of breast cancer, as well as the impact of these gene polymorphisms on aromatase function。