

Rabbit Anti-Aromatase antibody

SL0114R

Product Name	Aromatase
Chinese Name	芳香化酶/细胞色素 P450/雌激素合成酶抗体
Alias	Cytochrome p450 19A1; Estrogen synthetase; ARO 1; ARO; ARO1; CPV; CYPXIX; Cytochrome P450 family 19 subfamily A polypeptide 1; MGC104309; P 450AROM; P450AROM; CP19A_HUMAN; Cytochrome P-450AROM; CPV1; CYAR; CYP19; Cyp19a1; Cytochrome P450, family 19, subfamily A, polypeptide 1; Cytochrome P450, subfamily XIX (aromatization of androgens); Flavoprotein linked monooxygenase; Microsomal monooxygenase; OTTHUMP00000162543; OTTHUMP00000198350; P 450AROM.
Research Area	Neurobiology Apoptosis Synthesis and Degradation
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human, Mouse, Rat, (predicted: Dog, Pig, Cow, Horse, Rabbit, Sheep,) WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 (Paraffin sections need antigen repair)
Applications	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	55kDa
Cellular localization	The cell membrane
Form	Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human Aromatase: 51-150/503
Lsotype	IgG
Purification	affinity purified by Protein A
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

Attention

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

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Aromatase is a key enzyme in steroidogenesis and plays an important role in sexual differentiation, oestrogen biosynthesis, fertility and carcinogenesis. It is highly conserved amongst mammals, and is highly expressed in placental tissue. Many environmental chemicals may influence aromatase activity and thereby disrupt endocrine function.

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 (AEXS) [MIM:139300]; also known as familial gynecomastia. AEXS is characterized by an estrogen excess due to an increased aromatase activity.

Product Detail

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.

SWISS:

P11511

Gene ID:

1588

Database links:

[Entrez Gene: 1588](#) Human

[Entrez Gene: 13075](#) Mouse

[Entrez Gene: 25147](#) Rat

[Omim: 107910](#) Human

[SwissProt: P11511](#) Human

[SwissProt: P28649](#) Mouse

芳香化酶是一种微粒体酶系统,催化睾酮经三步连续转化转变成 17- β -雌二醇,在反应中睾酮作为激素原。

细胞色素 P450 主要分布在内质网和 Mitochondrion 内膜上,作为一种末端加氧酶,参与了生物体内的甾醇类激素合成等过程。

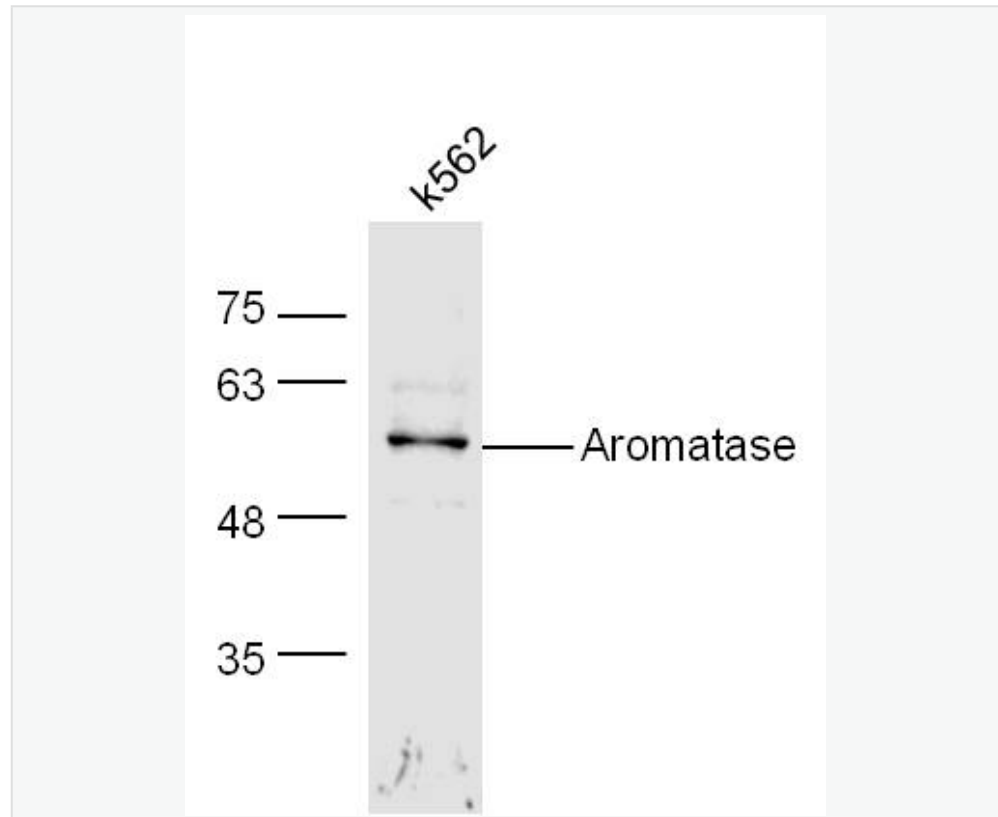
近年来,对细胞色素 P450 的结构、功能特别是对其在药物代谢中的作用的研究有了较大的进展。

最新研究表明细胞色素 P450 还是药物代谢过程中的关键酶,而且对 cell factor 和体温调节都有重要影响。

芳香化酶-细胞色素 P450 作为和药物代谢及 cell factor 相关的重要酶类,在药物代谢和免疫中起着相当重要的作用,对于它的研究将有助于新药的开发,并能帮助人们更加清楚的认识药物的代谢途径,在未来的新药中减少副作用,增加药物疗效。随着对细胞色素 P450 研究的深入,将有更多相关的药物代谢途径被发现,人们开发新药的视野将更加开阔,新药开发的速度也将加快,质量进一步提高。

鉴于 P450 的研究无论在理论上探索生物的生理代谢、选择进化和生物与环境的关系方面,或在环境保护、农业生态、生物防治、作物基因工程和医药卫生等应用方面,都有广泛的实践意义,因此,应该受到更大的关注和重视。

Product Picture



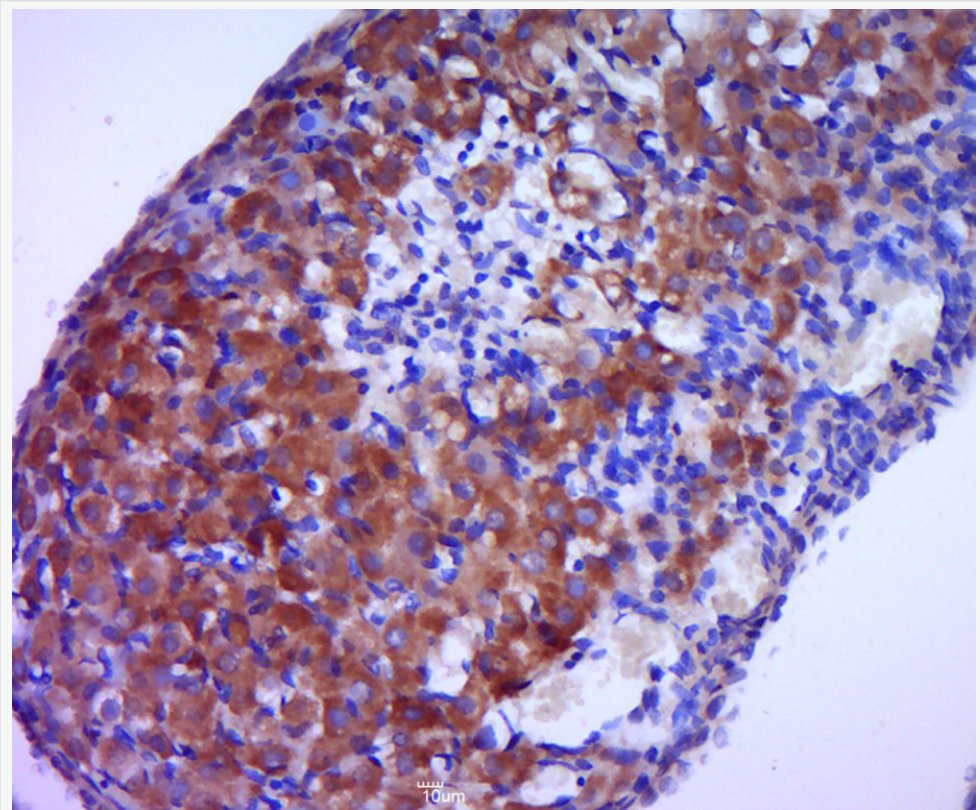
Sample: K562 (human)Cell Lysate at 40 ug

Primary: Anti- Aromatase (SL0114R) at 1/300 dilution

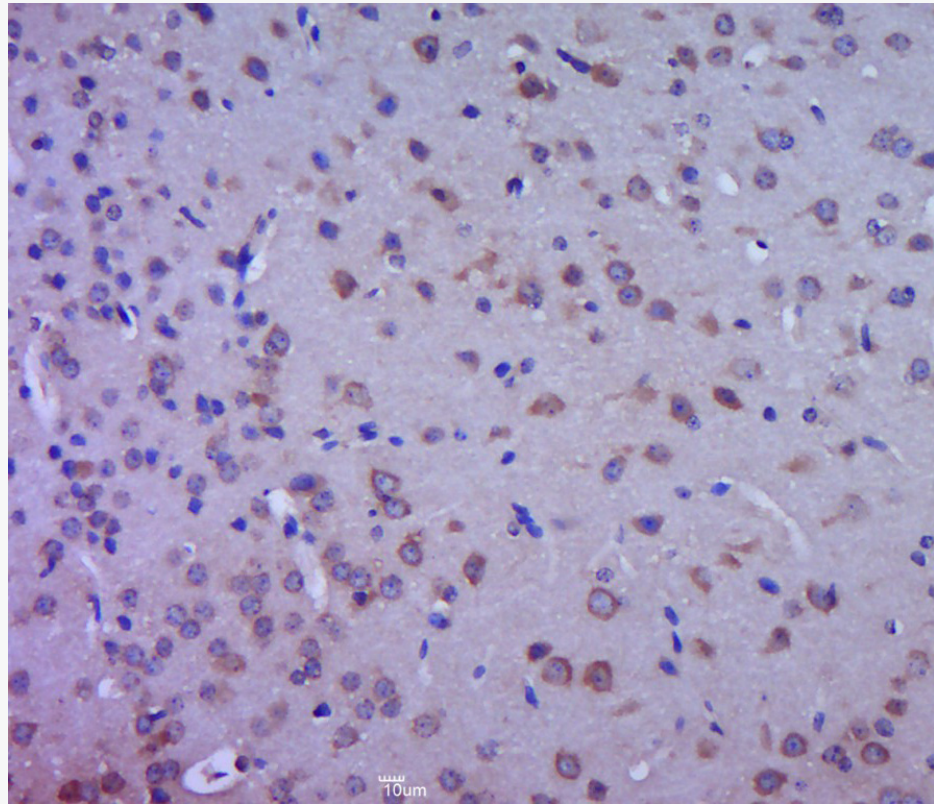
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 55 kD

Observed band size: 55 kD



Paraformaldehyde-fixed, paraffin embedded (rat ovary tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Aromatase) Polyclonal Antibody, Unconjugated (SL0114R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (mouse brain tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Aromatase) Polyclonal Antibody, Unconjugated (SL0114R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.