

**CYP19 / Aromatase Antibody (Internal)**  
**Goat Polyclonal Antibody**  
**Catalog # ALS12617****Specification**

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**CYP19 / Aromatase Antibody (Internal) - Product Information**

Application	<b>WB, IHC</b>
Primary Accession	<a href="#">P11511</a>
Reactivity	<b>Human</b>
Host	<b>Goat</b>
Clonality	<b>Polyclonal</b>
Calculated MW	<b>58kDa KDa</b>

**CYP19 / Aromatase Antibody (Internal) - Additional Information****Gene ID** 1588**Other Names**

Aromatase, 1.14.14.14, CYPXIX, Cytochrome P-450AROM, Cytochrome P450 19A1, Estrogen synthase, CYP19A1, ARO1, CYAR, CYP19

**Target/Specificity**

Human CYP19A1 / Aromatase. This antibody is expected to recognise both reported isoforms (NP\_000094.2 and NP\_112503.1), which are identical

**Reconstitution & Storage**

Store at -20°C. Minimize freezing and thawing.

**Precautions**

CYP19 / Aromatase Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

**CYP19 / Aromatase Antibody (Internal) - Protein Information****Name** CYP19A1 {ECO:0000303|PubMed:24705274, ECO:0000312|HGNC:HGNC:2594}**Function**

A cytochrome P450 monooxygenase that catalyzes the conversion of C19 androgens, androst-4-ene-3,17-dione (androstenedione) and testosterone to the C18 estrogens, estrone and estradiol, respectively (PubMed: [27702664](http://www.uniprot.org/citations/27702664)), PubMed: [2848247](http://www.uniprot.org/citations/2848247)). Catalyzes three successive oxidations of C19 androgens: two conventional oxidations at C19 yielding 19-hydroxy and 19-oxo/19-aldehyde derivatives, followed by a third oxidative aromatization step that involves C1-beta hydrogen abstraction combined with cleavage of the C10-C19 bond to yield a phenolic A ring and formic acid (PubMed: [20385561](http://www.uniprot.org/citations/20385561)). Alternatively, the third oxidative reaction yields a 19-norsteroid and formic acid. Converts dihydrotestosterone to delta<sup>1,10</sup>-dehydro 19- nordihydrotestosterone and may play a role in homeostasis of this potent

androgen (PubMed:<a href="http://www.uniprot.org/citations/22773874" target="\_blank">22773874</a>). Also displays 2-hydroxylase activity toward estrone (PubMed:<a href="http://www.uniprot.org/citations/22773874" target="\_blank">22773874</a>). Mechanistically, uses molecular oxygen inserting one oxygen atom into a substrate, and reducing the second into a water molecule, with two electrons provided by NADPH via cytochrome P450 reductase (CPR; NADPH-ferrihemoprotein reductase) (PubMed:<a href="http://www.uniprot.org/citations/20385561" target="\_blank">20385561</a>, PubMed:<a href="http://www.uniprot.org/citations/22773874" target="\_blank">22773874</a>).

#### Cellular Location

Endoplasmic reticulum membrane; Multi-pass membrane protein. Microsome membrane; Multi-pass membrane protein

#### Tissue Location

Widely expressed, including in adult and fetal brain, placenta, skin fibroblasts, adipose tissue and gonads

### CYP19 / Aromatase Antibody (Internal) - Protocols

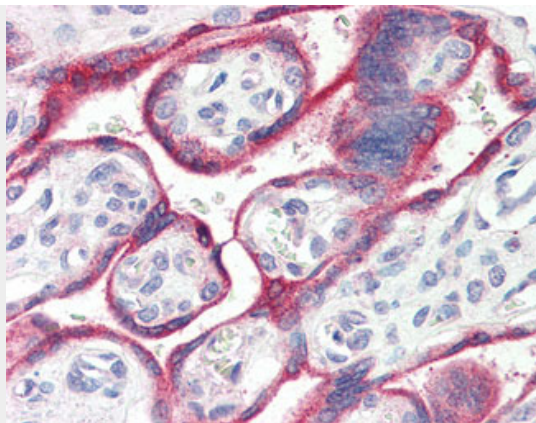
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### CYP19 / Aromatase Antibody (Internal) - Images



Antibody (0.1 ug/ml) staining of Human Placenta lysate (35 ug protein in RIPA buffer).



Anti-Aromatase antibody IHC of human placenta.

### **CYP19 / Aromatase Antibody (Internal) - Background**

Catalyzes the formation of aromatic C18 estrogens from C19 androgens.

### **CYP19 / Aromatase Antibody (Internal) - References**

Harada N.,et al.Biochem. Biophys. Res. Commun. 156:725-732(1988).

Chen S.,et al.DNA 7:27-38(1988).

Corbin C.J.,et al.Proc. Natl. Acad. Sci. U.S.A. 85:8948-8952(1988).

Toda K.,et al.FEBS Lett. 247:371-376(1989).

Means G.D.,et al.J. Biol. Chem. 264:19385-19391(1989).