

# Aromatase Rabbit mAb

Catalog # AP75103

## Product Information

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|--------------------------|------------------------|
| <b>Application</b>       | WB, IP                 |
| <b>Primary Accession</b> | <a href="#">P11511</a> |
| <b>Reactivity</b>        | Rat, Human, Mouse      |
| <b>Host</b>              | Rabbit                 |
| <b>Clonality</b>         | Monoclonal Antibody    |
| <b>Isotype</b>           | IgG                    |
| <b>Conjugate</b>         | Unconjugated           |
| <b>Purification</b>      | Affinity Purified      |
| <b>Calculated MW</b>     | 57883                  |

## Additional Information

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|--------------------|---|
| <b>Gene ID</b>     | 1588  |
| <b>Other Names</b> | CYP19A1   |
| <b>Dilution</b>    | WB~~1:1000-1:5000 IP~~1:10-1:200  |
| <b>Format</b>      | Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA. |
| <b>Storage</b>     | Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.        |

## Protein Information

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|                 |   |
|-----------------|---|
| <b>Name</b>     | CYP19A1 {ECO:0000303   PubMed:24705274, ECO:0000312   HGNC:HGNC:2594}   |
| <b>Function</b> | 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: <a href="#">27702664</a> , PubMed: <a href="#">2848247</a> ). 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: <a href="#">20385561</a> ). Alternatively, the third oxidative reaction yields a 19-norsteroid and formic acid. Converts dihydrotestosterone to delta1,10-dehydro 19- nordihydrotestosterone and may play a role in homeostasis of this potent androgen (PubMed: <a href="#">22773874</a> ). Also displays 2-hydroxylase activity toward estrone (PubMed: <a href="#">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:[20385561](#), PubMed:[22773874](#)).

**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

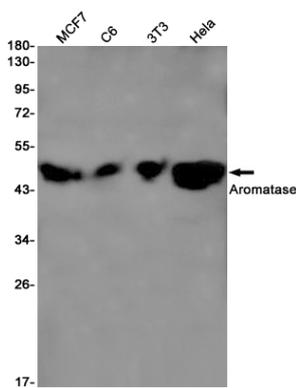
**Background**

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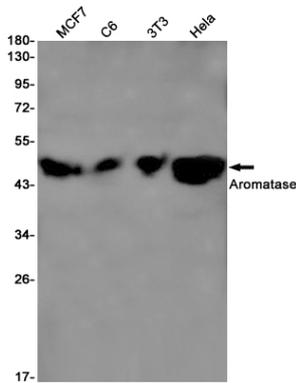
Catalyzes the formation of aromatic C18 estrogens from C19 androgens.

**Images**

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Western blot analysis of Aromatase in MCF-7, C6, 3T3, HeLa lysates using Aromatase antibody.



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