

Aromatase Antibody
Rabbit Polyclonal Antibody
Catalog # ABV10444**Specification**

Aromatase Antibody - Product Information

Application	WB, IHC
Primary Accession	P11511
Reactivity	Human, Mouse, Rat, Rabbit, Pig, Chicken, Bovine, Horse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	57883

Aromatase Antibody - Additional Information**Gene ID 1588**

Application & Usage	Western blotting (0.5-4 µg/ml), Immunohistochemistry (10-20 µg/ml). However, the optimal concentrations should be determined individually. Jurkat cell lysate can be used as a positive control. The antibody should recognize aromatase in samples from human, mouse, rat, bovine, porcine, pig, sheep, rabbit, horse and chicken origins. A 55 kDa band can be detected, corresponding to the expected molecular weight of Aromatase. An additional 35 kDa band (believe to be the cleavage product of Aromatase) can also be detected in Jurkat cells.
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Other Names

25147 , Cyp19a1, Aromatase , Cyp19 , p450arom , ARO1, ARO 1, CPV, CYP19A1 , MGC104309

Target/Specificity

Aromatase

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

100 µg (0.2mg/ml) affinity purified rabbit anti-Aromatase polyclonal antibody in phosphate-buffered saline (PBS) containing 30% glycerol, 0.5% BSA, and 0.01% thimerosal.

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions

Precautions

Aromatase Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Aromatase Antibody - 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, PubMed: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). 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:22773874). Also displays 2-hydroxylase activity toward estrone (PubMed:22773874). 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

Aromatase Antibody - 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](#)

Aromatase Antibody - Images**Aromatase Antibody - Background**

Aromatase is a key enzyme in steroidogenesis and plays an important role in sexual differentiation, fertility, and carcinogenesis. Many environmental chemicals may influence aromatase activity and thereby disrupt endocrine function.