

Aromatase Antibody

Rabbit mAb

Catalog # AP91162

Specification

Aromatase Antibody - Product Information

| | |
|-------------------|------------------------|
| Application | WB, IP |
| Primary Accession | P11511 |
| Reactivity | Rat |
| Clonality | Monoclonal |

Other Names

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

| | |
|---------------|------------|
| Isotype | Rabbit IgG |
| Host | Rabbit |
| Calculated MW | 57883 Da |

Aromatase Antibody - Additional Information

| | |
|------------------------------|---|
| Dilution | WB~~1:1000 IP~~N/A |
| Purification | Affinity-chromatography |
| Immunogen | A synthesized peptide derived from human Aromatase |
| Description | Catalyzes the formation of aromatic C18 estrogens from C19 androgens. |
| Storage Condition and Buffer | Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle. |

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

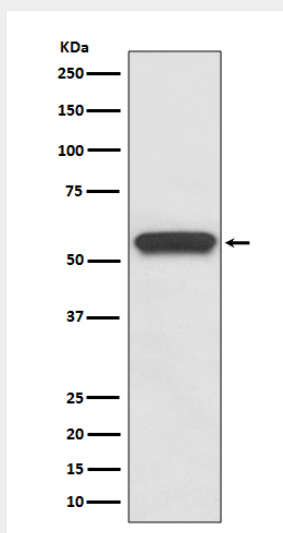
Widely expressed, including in adult and fetal brain, placenta, skin fibroblasts, adipose tissue and gonads

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



Western blot analysis of Aromatase expression in rat brain lysate.