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Aromatase Rabbit mAb

Catalog # AP75103

Product Information

Application	WB, IP
Primary Accession	P11511
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	57883

Additional Information

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

Protein Information

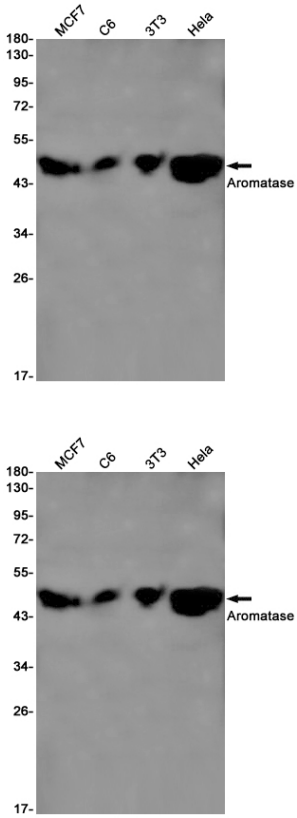
Name	CYP19A1 {ECO:0000303|PubMed:24705274, ECO:0000312|HGNC:HGNC:2594}
Function	A cytochrome P450 monooxygenase that catalyzes the conversion of C19 androgens, androst-4-ene-3,17-dione (androstenedione) and testosterone to the C18 estrogens, estrone and estradiol, respectively (PubMed:27702664, PubMed:2848247). 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

Background

Catalyzes the formation of aromatic C18 estrogens from C19 androgens.

Images



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.