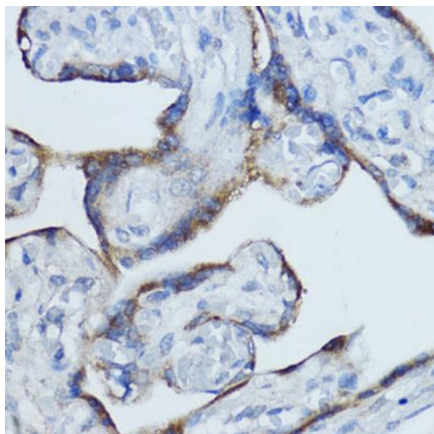


Anti-CYP19A1 antibody

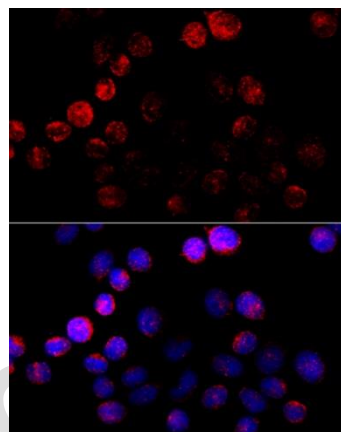
Cat # NB-22-35474-50 size: 50µl

Cat # NB-22-35474-100 size: 100µl

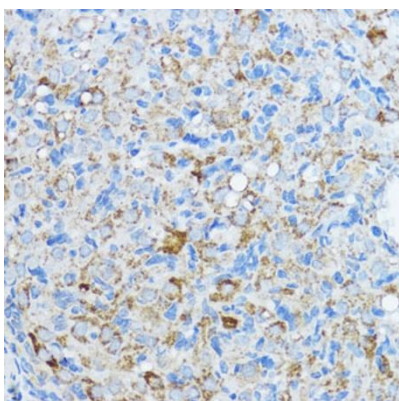
Cat # NB-22-35474-200 size: 200µl



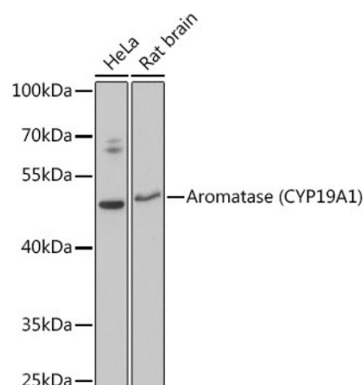
Immunohistochemistry of paraffin-embedded human placenta using Aromatase (CYP19A1) antibody at dilution of 1:100 (40x lens).



Immunofluorescence analysis of HeLa cells using Aromatase (CYP19A1) antibody at dilution of 1:100 (40x lens). Blue: DAPI for nuclear staining.



Immunohistochemistry of paraffin-embedded rat ovary using Aromatase (CYP19A1) antibody at dilution of 1:100 (40x lens).



Western blot analysis of extracts of various cell lines, using Aromatase (CYP19A1) antibody at 1:3000 dilution. Secondary antibody: HRP Goat Anti rabbit IgG (H+L) at 1:10000 dilution. Lysates/proteins: 25ug per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit. Exposure time: 20s.

Description

Rabbit polyclonal antibody anti-Aromatase (1-180) is suitable for use in Western Blot, Immunohistochemistry and Immunofluorescence.

Product Information

Host:	Rabbit
Applications:	WB, IHC, IF
Reactivity:	Human, Mouse, Rat
Clonality:	Polyclonal
Conjugation:	Unconjugated

Isotype:	IgG
Formulation:	PBS containing 0.02% Sodium Azide, 50% Glycerol, pH7.3.
Purification:	Affinity purification.
Dilution Range:	WB 1:1000-1:2000 IHC 1:50-1:200 IF 1:50-1:200
Storage Instruction:	Store in a freezer at -20°C and avoid freeze-thaw cycles.

Target

Gene Symbol:	CYP19A1
Gene ID:	1588
Uniprot ID:	CP19A_HUMAN
Immunogen Region:	1-180
Immunogen:	Recombinant fusion protein containing a sequence corresponding to amino acids 1-180 of human Aromatase (CYP19A1) (NP_000094.2).

Additional information

Tissue Specificity:	Widely expressed, including in adult and fetal brain, placenta, skin fibroblasts, adipose tissue and gonads.
Post Translational Modifications:	Phosphorylated in vitro by PKA and PKG/PRKG1. These phosphorylations inhibit the catalytic activity as measured by estrone synthesis from androstenedione (36% decrease for PKA and 30% for PKG/PRKG1).
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. 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. 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. Also displays 2-hydroxylase activity toward estrone. 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).
Protein Name:	Aromatase, Cypxix, Cytochrome P-450arom, Cytochrome P450 19a1, Estrogen Synthase
Database Links:	Reactome: R-HSA-193144 Reactome: R-HSA-211976 Reactome: R-HSA-5579030
Cellular Localisation:	Endoplasmic Reticulum Membrane, Multi-Pass Membrane Protein, Microsome Membrane

***For reference only
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