

# CYP19A1 Polyclonal Antibody

Catalog # AP69373

## Product Information

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Application	WB, IHC-P, IF
Primary Accession	<a href="#">P11511</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	57883

## Additional Information

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Gene ID	1588
Other Names	CYP19A1; ARO1; CYAR; CYP19; Cytochrome P450 19A1; Aromatase; CYPXIX; Cytochrome P-450AROM; Estrogen synthase
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications. IHC-P~~N/A IF~~1:50~200
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

## Protein Information

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Name	CYP19A1 {ECO:0000303   PubMed:24705274, ECO:0000312   HGNC:HGNC:2594}
Function	<p>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</p>

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

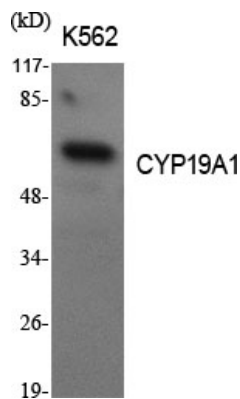
## Background

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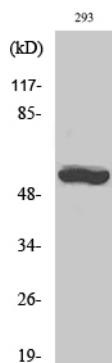
Catalyzes the formation of aromatic C18 estrogens from C19 androgens.

## Images

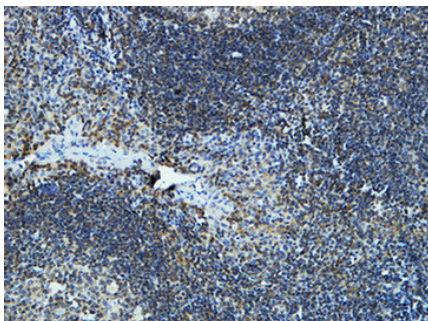
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Western Blot analysis of various cells using CYP19A1 Polyclonal Antibody diluted at 1 : 1000

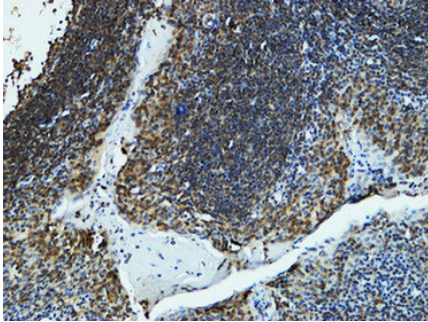
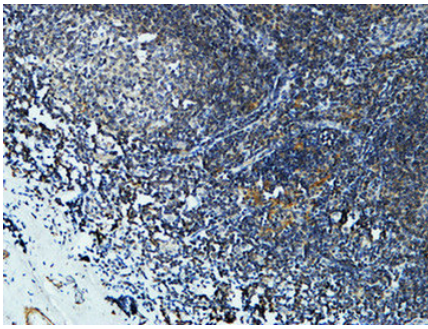


Western Blot analysis of 293 cells using CYP19A1 Polyclonal Antibody diluted at 1 : 1000



Immunohistochemical analysis of paraffin-embedded Human Amygdala. 1, Antibody was diluted at 1:100(4°,overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).

Immunohistochemical analysis of paraffin-embedded Human Amygdala. 1, Antibody was diluted at 1:100(4°,overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).



Immunohistochemical analysis of paraffin-embedded Human Amygdala. 1, Antibody was diluted at 1:100(4°,overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).

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