For Research Use Only

CYP19A1 Polyclonal antibody

Catalog Number:16554-1-AP Featured Product 19 Publications

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Basic Information

Catalog Number:
16554-1-AP

Size:
150ul , Concentration: 650 ug/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG9765

GenBank Accession Number:
BC022896

GeneID (NCBI):
1588

UNIPROT ID:
P11511

Full Name:
cytochrome P450, family 19, subfamily A, polypeptide 1

Calculated MW:
20 kDa, 25 kDa, 58 kDa

Observed MW:
49-55 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:500-1:2000
IHC 1:50-1:500
IF-P 1:50-1:500
IF/ICC 1:200-1:800

Applications

Tested Applications:
WB, IHC, IF/ICC, IF-P, ELISA

Cited Applications:
WB, IHC, IF

Species Specificity:
human, mouse, rat

Cited Species:
human, mouse, rat, sheep, goat, geese

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : HEK-293T cells, A2780 cells, human placenta tissue, SKOV-3 cells, mouse liver tissue, mouse ovary tissue, rat ovary tissue

IHC : human placenta tissue, rat brain tissue, human kidney tissue, human skeletal muscle tissue, human gliomas tissue, human testis tissue, human spleen tissue, human lung tissue, human ovary tissue

IF-P : human placenta tissue,

IF/ICC : HepG2 cells,

Background Information

CYP19A1(Cytochrome P450 19A1) is also named as ARO1(aromatase), CYAR, CYP19, estrogen synthase and belongs to the cytochrome P450 family. It is a terminal enzyme which transforms irreversibly androgens into estrogens and it is present in the endoplasmic reticulum of numerous tissues(PMID:16406261). The gene encodes a protein with the molecular weight between 46 kDa and 69 kDa(PMID:8129748) and the protein can be glycosylated, but the level of glycosylation does not seem to be essential for CYP19A1 activity(PMID:12606587). Brain aromatase may be neuroprotective by increasing the local estrogen levels in injured neurons so that genetic variation in the brain aromatase gene may modify the risk for AD(PMID:16767510).

Notable Publications

Author	Pubmed ID	Journal	Application
Huidan Wang	26358501	Sci Rep	WB
Ruiming Fan	32875818	Br Poult Sci	WB
Yan Peng	33109277	Biol Res	WB

Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
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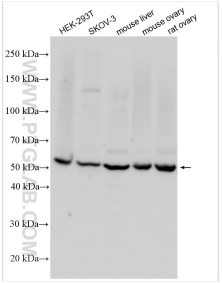
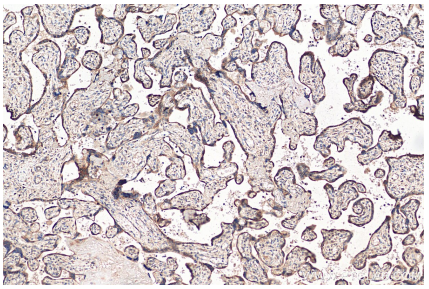
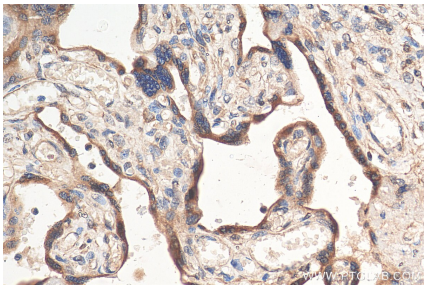
Selected Validation Data



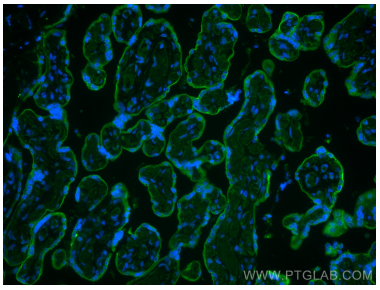
Various lysates were subjected to SDS PAGE followed by western blot with 16554-1-AP (CYP19A1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human placenta tissue slide using 16554-1-AP (CYP19A1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human placenta tissue slide using 16554-1-AP (CYP19A1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed human placenta tissue using CYP19A1 antibody (16554-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).

Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using CYP19A1 antibody (16554-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).