For Research Use Only

CYP11A1 Polyclonal antibody

Catalog Number:13363-1-AP 64 Publications

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Basic Information

Catalog Number:
13363-1-AP

Size:
150ul , Concentration: 450 ug/ml by Nanodrop and 300 ug/ml by Bradford method using BSA as the standard;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG4182

GenBank Accession Number:
BC032329

GeneID (NCBI):
1583

UNIPROT ID:
P05108

Full Name:
cytochrome P450, family 11, subfamily A, polypeptide 1

Calculated MW:
521 aa, 60 kDa

Observed MW:
49-52 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:1000-1:4000
IHC 1:100-1:400
IF/ICC 1:50-1:500

Applications

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

Cited Applications:
WB, IHC, IF

Species Specificity:
human, mouse, rat

Cited Species:
human, mouse, rat, pig, chicken

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 : human placenta tissue, HeLa cells, mouse ovary tissue, mouse testis tissue, rat testis tissue

IHC : human placenta tissue, human testis tissue

IF/ICC : HepG2 cells,

Background Information

CYP11A1 is also known as cytochrome P450C11A1, cytochrome P450scc and cytochrome P450, subfamily XIA. It is the first enzyme of all steroidogenic pathways, its elimination results in syndromes of steroid deficiency, including electrolyte imbalance, aberrant gene regulation, and suppression of male sex organ development(PMID: 12145347). Expression of CYP11A1 has been a useful tool for monitoring the differentiation state of cells from varius endocrine tissues. Identification of CYP11A1 expression by 13363-1-AP detected a ~45kd band in human placenta, with respect to the reported band at 49-52kd by Roby, et al and Durkee, et al. The murine 32-kDa isoform of Cyp11a1 is not produced by omission of the first ATG-containing exon (as is the case for human CYP11A1) but perhaps by alternative translational initiation(PMID:19342447).

Notable Publications

Author	Pubmed ID	Journal	Application
Yirong Wang	36063102	Pharm Biol	WB
Shumin Li	34487832	J Steroid Biochem Mol Biol	WB
Jinzhao Zhou	35999762	Ecotoxicol Environ Saf	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)
E: proteintech@ptglab.com
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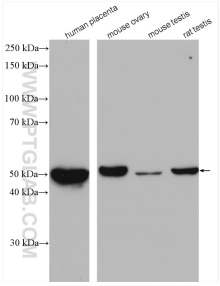
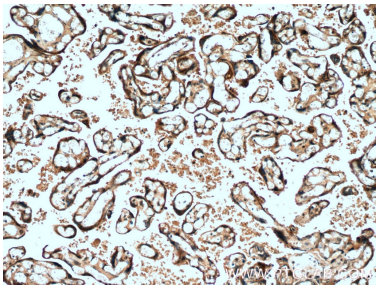
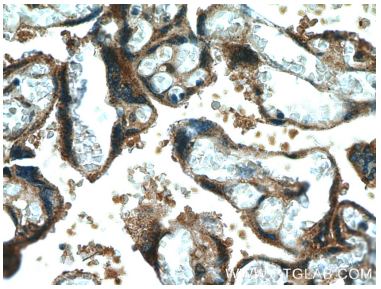
Selected Validation Data



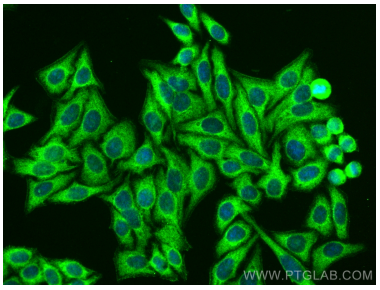
Various lysates were subjected to SDS PAGE followed by western blot with 13363-1-AP (CYP11A1 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human placenta tissue slide using 13363-1-AP (CYP11A1 Antibody) at dilution of 1:200 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human placenta tissue slide using 13363-1-AP (CYP11A1 Antibody) at dilution of 1:200 (under 40x lens).



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using CYP11A1 antibody (13363-1-AP) at dilution of 1:200 and Multi-rAb CoraLite ® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002).