abcam

ab288573

Anti-CYP11A1 antibody [EPR24868-86] - BSA and Azide free

Recombinant | RabMAb | Advanced Validation

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR24868-86
Purification technique	Affinity purification Protein A
Specificity	ICC application does not react with Mouse and Rat species. Flow Cyt application does not react with Mouse species.
Concentration	0.983 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

mIHC

Tested

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	ICC application does not react with Mouse and Rat species.

Not recommended

Species	Rat
Dilution info	-
Notes	ICC application does not react with Mouse and Rat species.

Species	Mouse
Dilution info	-
Notes	ICC application does not react with Mouse and Rat species.

Flow Cyt (Intra)

Tested

Species	Rat
Dilution info	-
Notes	FC application does not react with Mouse species.

Species	Human
Dilution info	-
Notes	FC application does not react with Mouse species.

Not recommended

Species	Mouse
Dilution info	-
Notes	FC application does not react with Mouse species.

IP

Tested

Species	Mouse, Rat, Human
Dilution info	-
Notes	-

WB

Tested

Species	Mouse, Rat, Human
Dilution info	-
Notes	-

IHC-P

Tested

Species	Mouse, Rat, Human
Dilution info	-
Notes	-

Target data

See full target information CYP11A1

Function	A cytochrome P450 monooxygenase that catalyzes the side-chain hydroxylation and cleavage of cholesterol to pregnenolone, the precursor of most steroid hormones (PubMed:21636783). Catalyzes three sequential oxidation reactions of cholesterol, namely the hydroxylation at C22 followed with the hydroxylation at C20 to yield 20R,22R-hydroxycholesterol that is further cleaved between C20 and C22 to yield the C21-steroid pregnenolone and 4-methylpentanal (PubMed:21636783). Mechanistically, uses molecular oxygen inserting one oxygen atom into a substrate and reducing the second into a water molecule. Two

electrons are provided by NADPH via a two-protein mitochondrial transfer system comprising flavoprotein FDXR (adrenodoxin/ferredoxin reductase) and nonheme iron-sulfur protein FDX1 or FDX2 (adrenodoxin/ferredoxin) (PubMed:21636783).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C

Notes

ab288573 is the carrier-free version of ab272494

Patented technology

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Conjugation ready

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	CYP11A1 also called cytochrome P450scc is an important enzyme that catalyzes the first step in steroid hormone biosynthesis. This enzyme has a molecular weight of approximately 60 kDa. It is primarily located in the mitochondria of steroidogenic tissues such as the adrenal cortex testes and ovaries. CYP11A1 converts cholesterol into pregnenolone a precursor for all steroid hormones. Its gene expression is tightly regulated by trophic hormones which play an important role in modulating steroid production.
Biological function summary	CYP11A1 is a member of the cytochrome P450 superfamily a large group of enzymes known for their role in oxidation and metabolism. It exists in the mitochondrial electron transport chain working closely with proteins such as ferredoxin and ferredoxin reductase. These interactions facilitate the conversion of cholesterol to pregnenolone. Through these biochemical activities CYP11A1 controls the synthesis rate of steroid hormones influencing various physiological functions including metabolism immune response and reproductive system dynamics.
Pathways	CYP11A1 operates within the steroidogenesis pathway which is essential for the synthesis of steroid hormones like cortisol and aldosterone. It directly interacts with StAR protein which transports cholesterol into mitochondria initiating the steroidogenesis process. Moreover CYP11A1 fits into the pregnenolone biosynthesis pathway showing functional connectivity with other cytochrome P450 enzymes like CYP17A1. These interconnected pathways highlight the role of CYP11A1 as a vital catalyst in hormone synthesis affecting both endocrine and metabolic pathways.
Associated diseases and disorders	CYP11A1 mutations or expression abnormalities have associations with conditions such as congenital adrenal hyperplasia (CAH) and primary adrenal insufficiency. CAH arises from enzyme deficiencies in the steroidogenesis pathway and changes in CYP11A1 activity can exacerbate the disorder by altering cortisol and aldosterone synthesis. Additionally the enzyme's link with StAR protein suggests a possible connection to lipoid congenital adrenal hyperplasia where defects in cholesterol transport may disrupt steroid production. Understanding these relationships helps in exploring therapeutic targets for steroid-related diseases.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

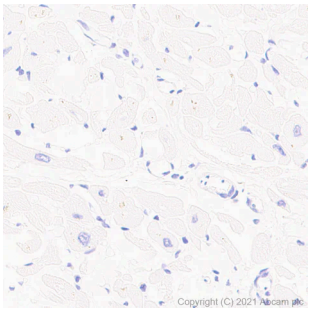
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

18 product images



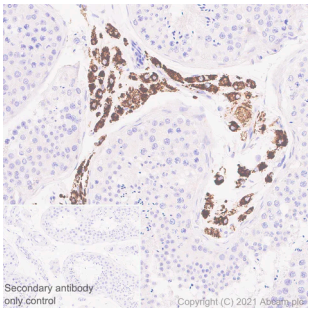
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CYP11A1 antibody [EPR24868-86] - BSA and Azide free (ab288573)

CYP11A1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CYP11A1 antibody

This data was developed using ab272494, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded Human cardiac muscle tissue labelling CYP11A1 with ab272494 at 1/10000 (0.054 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). **Negative control:** no staining on human cardiac muscle. The section was incubated with ab272494 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins



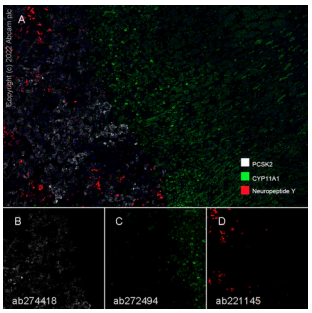
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CYP11A1 antibody [EPR24868-86] - BSA and Azide free (ab288573)

CYP11A1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CYP11A1 antibody

This data was developed using ab272494, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded Human testis tissue labelling CYP11A1 with ab272494 at 1/10000 (0.054 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on Leydig cells of human testis. The section was incubated with ab272494 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

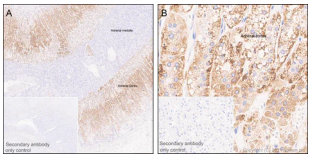
Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins



Multiplex immunohistochemistry - Anti-CYP11A1 antibody [EPR24868-86] - BSA and Azide free (ab288573)

Fluorescence multiplex immunohistochemical analysis of human adrenal gland (formalin-fixed paraffin-embedded section). Panel A shows merged staining of anti-PCSK2 stained on adrenal medulla (ab274418; gray; Opal™690) at 1:2000 (0.263 µg/ml) [Panel B], anti-CYP11A1 stained on adrenal cortex (ab272494; green; Opal™520) at 1:10000 (0.053 µg/ml) [Panel C], and anti-Neuropeptide Y stained on chromaffin cells (ab221145; red; Opal™570) at 1:2000 (0.279 µg/ml) [Panel D] on human adrenal gland. DAPI was used as a nuclear counter stain. Followed by Opal Polymer HRP Ms + Rb secondary antibody. The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit. Image acquisition was performed with Leica SP8 confocal microscope. The section was incubated in three rounds of staining: in the order of ab274418, ab272494, and ab221145 for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins was used. This data was developed using ab272494, the same antibody clone in a different buffer formulation.



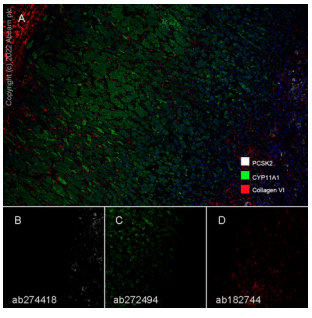
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CYP11A1 antibody [EPR24868-86] - BSA and Azide free (ab288573)

CYP11A1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CYP11A1 antibody

This data was developed using ab272494, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded Human adrenal gland tissue labelling CYP11A1 with ab272494 at 1/10000 (0.054 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on human adrenal cortex (PMID: 22796438). (A) Low☒powered (magnification, x40) and (B) high☒powered (magnification, x400) microscopic images. The section was incubated with ab272494 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

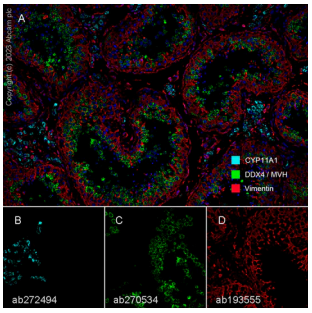
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins



Multiplex immunohistochemistry - Anti-CYP11A1 antibody [EPR24868-86] - BSA and Azide free (ab288573)

Fluorescence multiplex immunohistochemical analysis of human adrenal gland (formalin-fixed paraffin-embedded section). Panel A shows merged staining of anti-PCSK2 stained on adrenal medulla (ab274418; gray; Opal™690) at 1:2000 (0.263 µg/ml) [Panel B], anti-CYP11A1 stained on adrenal cortex (ab272494; green; Opal™520) at 1:10000 (0.053 µg/ml) [Panel C], and anti-Collagen VI stained on extracellular matrix (ab182744; red; Opal™570) at 1:1000 (1.518 µg/ml) [Panel D] on human adrenal gland. DAPI was used as a nuclear counter stain. Followed by Opal Polymer HRP Ms + Rb secondary antibody. The immunostaining was performed on a Leica Biosystems BOND® RX

instrument with an Opal™ 4-color kit. Image acquisition was performed with Leica SP8 confocal microscope. The section was incubated in three rounds of staining: in the order of ab274418, ab272494, and ab182744 for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins was used. This data was developed using ab272494, the same antibody clone in a different buffer formulation.



Multiplex immunohistochemistry - Anti-CYP11A1 antibody [EPR24868-86] - BSA and Azide free (ab288573)

CYP11A1 Multiplex immunohistochemistry staining of Human testis using rabbit Anti-CYP11A1 antibody

This data was developed using ab272494, the same antibody clone in a different buffer formulation.
Multiplex immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human testis tissue.

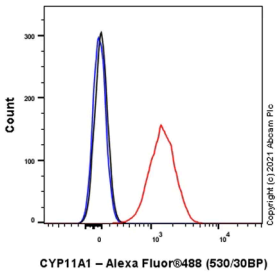
Panel A: merged staining of anti-Vimentin (red; Opal™690), anti-CYP11A1 (cyan; Opal™520) and anti-DDX4 / MVH (green; Opal™570) on human testis.
Panel B: anti-CYP11A1 stained on Leydig cells.
Panel C: anti-DDX4 / MVH stained on all spermatogenic cell types.
Panel D: anti-Vimentin stained on Sertoli cells and fibroblasts.

The section was incubated in three rounds of staining: in the order of ab193555 (1:2000 dilution) and ab272494 (1:10000 dilution) for 30 mins, then ab270534 (1:2000 dlilution) for 10 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit. Image acquisition was performed with Leica SP8 confocal microscope.

DAPI was used as a nuclear counter stain. Opal Polymer HRP Ms + Rb was used as a secondary.

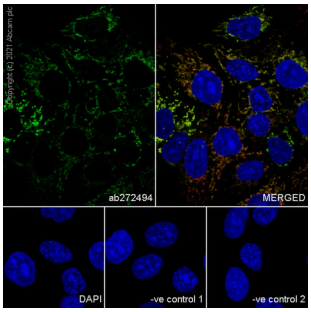
Antigen retrieval: Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



Flow Cytometry (Intracellular) - Anti-CYP11A1 antibody [EPR24868-86] - BSA and Azide free (ab288573)

CYP11A1 Flow Cytometry (Intracellular) staining using rabbit Anti-CYP11A1 antibody

This data was developed using ab272494, the same antibody clone in a different buffer formulation.
Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized JEG-3 (Human placenta epithelial choriocarcinoma) cells labelling CYP11A1 with ab272494 at 1/500 dilution (0.1ug) (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/2000 dilution was used as the secondary antibody.



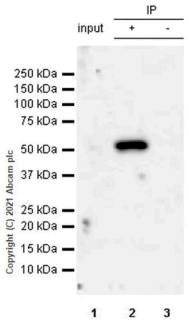
Immunocytochemistry/ Immunofluorescence - Anti-CYP11A1 antibody [EPR24868-86] - BSA and Azide free (ab288573)

CYP11A1 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-CYP11A1 antibody

This data was developed using ab272494, the same antibody clone in a different buffer formulation.
Immunofluorescent analysis of 100% methanol-fixed, 0.1% TritonX-100 permeabilized JEG-3 (human placenta epithelial choriocarcinoma) cells labelling CYP11A1 with ab272494 at 1/50 dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 dilution (Green). Confocal image showing cytoplasmic staining colocalized with mitochondrial marker (ab33985) in JEG-3 cell line. ab33985 Anti-COX IV mouse monoclonal antibody - Mitochondrial Marker was used to counterstain mitochondrion at 1/1000 dilution (Red). The Nuclear counterstain was DAPI (Blue).

-ve control 1: ab272494 at 1/50 dilution, followed by ab150120 Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) at 1/1000 dilution.

-ve control 2: ab33985 at 1/1000 dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution.



Immunoprecipitation - Anti-CYP11A1 antibody [EPR24868-86] - BSA and Azide free (ab288573)

This data was developed using ab272494, the same antibody clone in a different buffer formulation.
CYP11A1 was immunoprecipitated from 0.35 mg JEG-3 (Human placenta epithelial choriocarcinoma) whole cell lysate with ab272494 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab272494 at 1/1000 dilution. VeriBlot for IP secondary antibody(HRP)(ab131366) was used at 1/5000 dilution.

Lane 1: JEG-3 (Human placenta epithelial choriocarcinoma) whole cell lysate 10 ug

Lane 2: ab272494 IP in JEG-3 whole cell lysate

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab272494 in JEG-3 whole cell lysate

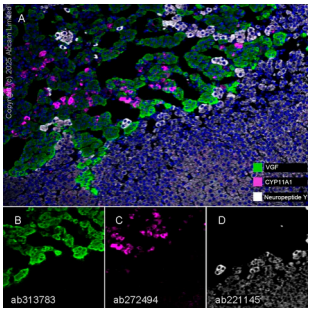
Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 58 seconds

All lanes:
Immunoprecipitation - Anti-CYP11A1 antibody [EPR24868-86] (ab272494)

Predicted band size: 60 kDa

Observed band size: 50 kDa



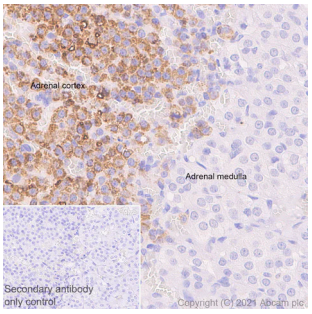
Multiplex immunohistochemistry - Anti-CYP11A1 antibody [EPR24868-86] - BSA and Azide free (ab288573)

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab313783).
Multiplex immunohistochemistry analysis of formalin/PFA-fixed paraffin-embedded Rat adrenal gland staining of VGF with ab313783 at a 1/500 (0.96 µg/ml) dilution, CYP11A1 with ab272494 at a 1/10000 (0.053 µg/ml) dilution and Neuropeptide Y with ab221145 at a 1/4000 (0.140 µg/ml) dilution followed by a ready to use secondary antibody Opal Polymer HRP Ms + Rb.

Panel A: merged staining of anti-VGF (green; Opal™690), anti-CYP11A1 (magenta; Opal™520) and anti-Neuropeptide Y (gray; Opal™570) on rat adrenal gland.
Panel B: anti-VGF staining endocrine cells in rat adrenal gland medulla.
Panel C: anti-CYP11A1 staining adrenal cortex in rat adrenal gland.
Panel D: anti-Neuropeptide Y staining chromaffin cellsa in rat adrenal gland medulla.
Nuclear DNA was labeled with DAPI (shown in blue).

The section was incubated in three rounds of staining: in the order of ab313783, ab272494 and ab221145 for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CYP11A1 antibody [EPR24868-86] - BSA and Azide free (ab288573)

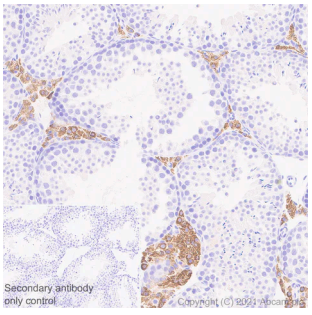
CYP11A1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CYP11A1 antibody

This data was developed using ab272494, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded Rat adrenal gland tissue labelling CYP11A1 with ab272494 at 1/10000 (0.054 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on rat adrenal cortex. The section was incubated with ab272494 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins

---



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CYP11A1 antibody [EPR24868-86] - BSA and Azide free (ab288573)

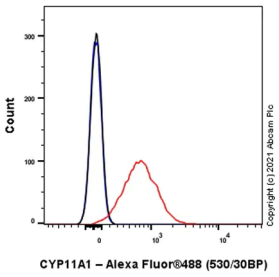
CYP11A1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CYP11A1 antibody

This data was developed using ab272494, the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded Mouse testis tissue labelling CYP11A1 with ab272494 at 1/10000 (0.054 ug/ml) followed by a ready to use LeicaDS9800(Bond™ Polymer Refine Detection). Positive staining on Leydig cells of mouse testis. The section was incubated with ab272494 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

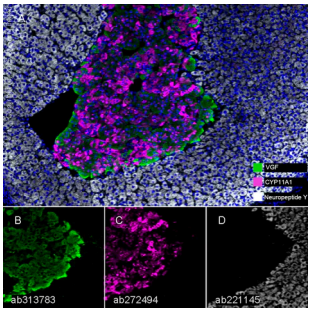
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins



Flow Cytometry (Intracellular) - Anti-CYP11A1 antibody [EPR24868-86] - BSA and Azide free (ab288573)

CYP11A1 Flow Cytometry (Intracellular) staining using rabbit Anti-CYP11A1 antibody

This data was developed using ab272494, the same antibody clone in a different buffer formulation.
Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized PC-12 (Rat adrenal gland pheochromocytoma) cells labelling CYP11A1 with ab272494 at 1/50 dilution (1ug) (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/2000 dilution was used as the secondary antibody.



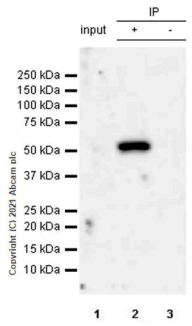
Multiplex immunohistochemistry - Anti-CYP11A1 antibody [EPR24868-86] - BSA and Azide free (ab288573)

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab272494).
Multiplex immunohistochemistry analysis of formalin/PFA-fixed paraffin-embedded Mouse adrenal gland staining of VGF with ab313783 at a 1/500 (0.96 µg/ml) dilution, CYP11A1 with ab272494 at a 1/10000 (0.053 µg/ml) dilution and Neuropeptide Y with ab221145 at a 1/4000 (0.140 µg/ml) dilution followed by a ready to use secondary antibody Opal Polymer HRP Ms + Rb.

Panel A: merged staining of anti-VGF (green; Opal™690), anti-CYP11A1 (magenta; Opal™520) and anti-Neuropeptide Y (gray; Opal™570) on mouse adrenal gland.
Panel B: anti-VGF staining endocrine cells in mouse adrenal gland medulla.
Panel C: anti-CYP11A1 staining adrenal cortex in mouse adrenal gland.
Panel D: anti-Neuropeptide Y staining endocrine cells in mouse adrenal gland medulla.
Nuclear DNA was labeled with DAPI (shown in blue).

The section was incubated in three rounds of staining: in the order of ab313783, ab272494 and ab221145 for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



Immunoprecipitation - Anti-CYP11A1 antibody [EPR24868-86] - BSA and Azide free (ab288573)

This data was developed using ab272494, the same antibody clone in a different buffer formulation.
CYP11A1 was immunoprecipitated from 0.35 mg Rat testis tissue lysate with ab272494 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab272494 at 1/1000 dilution. VeriBlot for IP secondary antibody(HRP)(ab131366) was used at 1/5000 dilution.

Lane 1: Rat testis tissue lysate 10 ug

Lane 2: ab272494 IP in Rat testis tissue lysate

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab272494 in rat testis tissue lysate

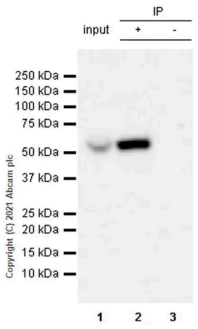
Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 58 seconds

All lanes:
Immunoprecipitation - Anti-CYP11A1 antibody [EPR24868-86] (ab272494)

Predicted band size: 60 kDa

Observed band size: 50 kDa



Immunoprecipitation - Anti-CYP11A1 antibody [EPR24868-86] - BSA and Azide free (ab288573)

This data was developed using ab272494, the same antibody clone in a different buffer formulation.
CYP11A1 was immunoprecipitated from 0.35 mg Mouse testis tissue lysate with ab272494 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab272494 at 1/1000 dilution. VeriBlot for IP secondary antibody(HRP)(ab131366) was used at 1/5000 dilution.

Lane 1: Mouse testis tissue lysate 10 ug

Lane 2: ab272494 IP in Mouse testis tissue lysate

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab272494 in mouse testis tissue lysate

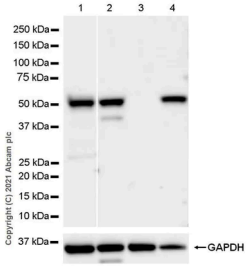
Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 10 seconds

All lanes:
Immunoprecipitation - Anti-CYP11A1 antibody [EPR24868-86] (ab272494)

Predicted band size: 60 kDa

Observed band size: 50 kDa



Western blot - Anti-CYP11A1 antibody [EPR24868-86] - BSA and Azide free (ab288573)

CYP11A1 Western blot staining using rabbit Anti-CYP11A1 antibody

This data was developed using ab272494, the same antibody clone in a different buffer formulation.
Blocking and diluting buffer and concentration: 5% NFDM/TBST.

Negative control: human heart (PMID:19491374, 21520051).

The band below (~37 kDa) in lane 2 may be caused by degradation.

Exposure times: Lane 1: 7.75 seconds; Lane 2-4: 37 seconds.

All lanes:
Western blot - Anti-CYP11A1 antibody [EPR24868-86] (ab272494) at 1/1000 dilution

Lane 1:
Human adrenal gland tissue lysate at 20 µg

Lane 2:
Human testis tissue lysate at 20 µg

Lane 3:
Human heart tissue lysate at 20 µg

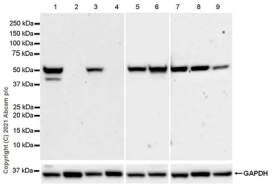
Lane 4:
JEG-3 (Human placenta epithelial choriocarcinoma) whole cell lysate at 20 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Predicted band size: 60 kDa

Observed band size: 50 kDa



Western blot - Anti-CYP11A1 antibody [EPR24868-86] - BSA and Azide free (ab288573)

CYP11A1 Western blot staining using rabbit Anti-CYP11A1 antibody

This data was developed using ab272494, the same antibody clone in a different buffer formulation.
Blocking and diluting buffer and concentration: 5% NFDM/TBST.

Low expression: brain (PMID: 21520051, 19491374).

Lane 7-9: This blot was developed using a higher sensitivity ECL substrate.

The band below (~37 kDa) in lane 1 may be caused by degradation.

Exposure times: Lane 1-4, 7-9: 3 minutes; Lane 5-6: 37 seconds

All lanes:
Western blot - Anti-CYP11A1 antibody [EPR24868-86] (ab272494) at 1/1000 dilution

Lane 1:
Mouse testis tissue lysate at 20 µg

Lane 2:
Mouse brain tissue lysate at 20 µg

Lane 3:
Rat testis tissue lysate at 20 µg

Lane 4:
Rat brain tissue lysate at 20 µg

Lane 5:
Mouse ovary tissue lysate at 20 µg

Lane 6:
Rat ovary tissue lysate at 20 µg

Lane 7:
NIH/3T3 (mouse embryonic fibroblast) whole cell lysate at 20 µg

Lane 8:
PC-12 (rat adrenal gland pheochromocytoma) whole cell lysate at 20 µg

Lane 9:
Rat-1 (rat embryonic fibroblast) whole cell lysate at 20 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ab97051) at 1/100000 dilution

Predicted band size: 60 kDa

Observed band size: 50 kDa

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