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ATP5A1 Rabbit mAb

Catalog No.: A11217 Recombinant 13 Publications

Basic Information

Observed MW
60kDa

Calculated MW
60kDa

Category
Primary antibody

Applications
WB,IP,IF/ICC,IF-P,IHC-P,ELISA

Cross-Reactivity
Human, Mouse, Rat

CloneNo number
ARC0549

Background

This gene encodes a subunit of mitochondrial ATP synthase. Mitochondrial ATP synthase catalyzes ATP synthesis, using an electrochemical gradient of protons across the inner membrane during oxidative phosphorylation. ATP synthase is composed of two linked multi-subunit complexes: the soluble catalytic core, F1, and the membrane-spanning component, Fo, comprising the proton channel. The catalytic portion of mitochondrial ATP synthase consists of 5 different subunits (alpha, beta, gamma, delta, and epsilon) assembled with a stoichiometry of 3 alpha, 3 beta, and a single representative of the other 3. The proton channel consists of three main subunits (a, b, c). This gene encodes the alpha subunit of the catalytic core. Alternatively spliced transcript variants encoding the different isoforms have been identified. Pseudogenes of this gene are located on chromosomes 9, 2, and 16.

Recommended Dilutions

WB	1:10000 - 1:40000
IP	0.5μg-4μg antibody for 400μg-600μg extracts of whole cells
IF/ICC	1:200 - 1:2000
IF-P	1:200 - 1:2000
IHC-P	1:200 - 1:2000
ELISA	Recommended starting concentration is 1 μg/mL. Please optimize the concentration based on your specific assay requirements.

Immunogen Information

Gene ID
498

Swiss Prot
P25705

Immunogen
Synthetic peptide. This information is considered to be commercially sensitive.

Synonyms
OMR; ORM; ATPM; MOM2; ATP5A; hATP1; ATP5A1; MC5DN4; ATP5AL2; COXPD22; HEL-S-123m

Product Information

Source
Rabbit

Isotype
IgG

Purification
Affinity purification

Storage
Store at -20℃. Avoid freeze / thaw cycles.
Buffer: PBS containing 50% glycerol and 0.05% BSA, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

Contact

400-999-6126

cn.market@abclonal.com.cn

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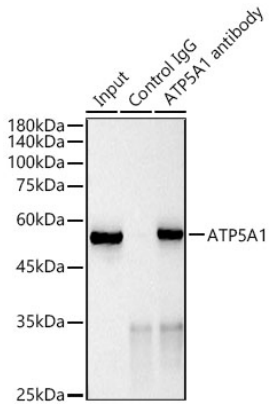
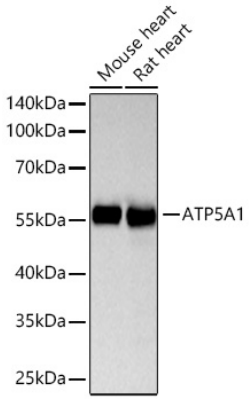
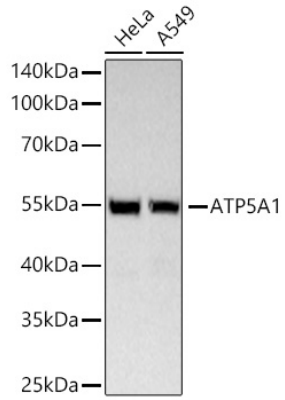
Validation Data



Immunoprecipitation analysis of 600 µg extracts of Mouse heart using 3 µg ATP5A1 antibody (A11217).
Western blot was performed from the immunoprecipitate using ATP5A1 antibody (A11217) at a dilution of 1:1000.

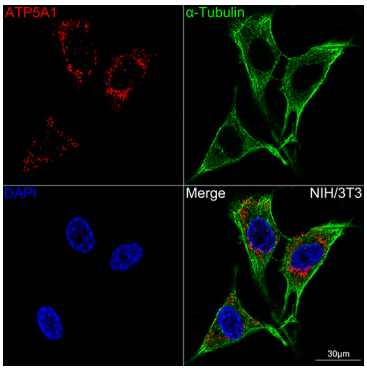


Western blot analysis of various lysates using ATP5A1 Rabbit mAb (A11217) at 1:10000 dilution incubated overnight at 4℃.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 20s.

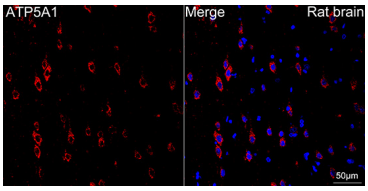


Western blot analysis of various lysates using ATP5A1 Rabbit mAb (A11217) at 1:10000 dilution incubated overnight at 4℃.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 45s.

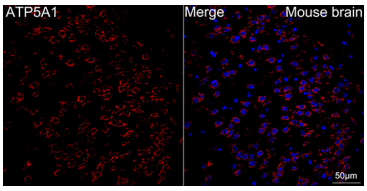
Validation Data



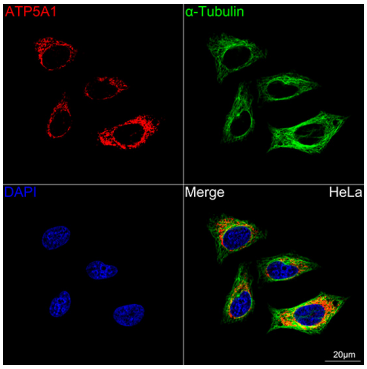
Confocal imaging of NIH/3T3 cells using ATP5A1 Rabbit mAb (A11217, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α-Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.



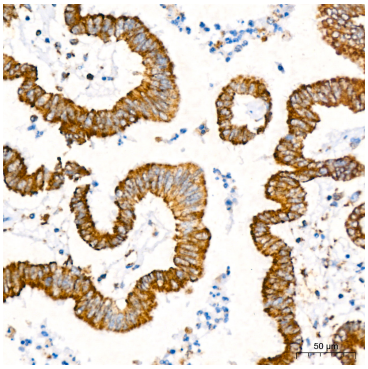
Confocal imaging of paraffin-embedded Rat brain tissue using ATP5A1 Rabbit mAb (A11217, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 40x. Perform microwave antigen retrieval with 0.01 M citrate buffer (pH 6.0) prior to IF staining.



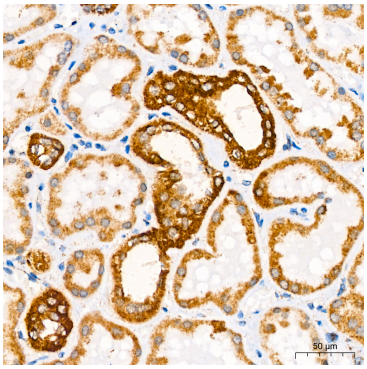
Confocal imaging of paraffin-embedded Mouse brain tissue using ATP5A1 Rabbit mAb (A11217, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 40x. Perform microwave antigen retrieval with 0.01 M citrate buffer (pH 6.0) prior to IF staining.



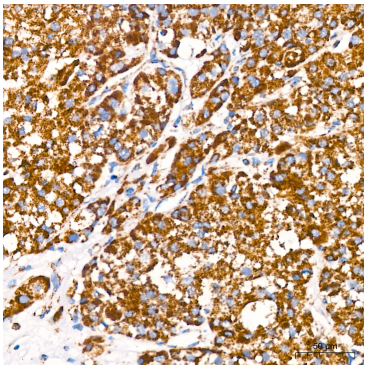
Confocal imaging of HeLa cells using ATP5A1 Rabbit mAb (A11217, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α-Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.



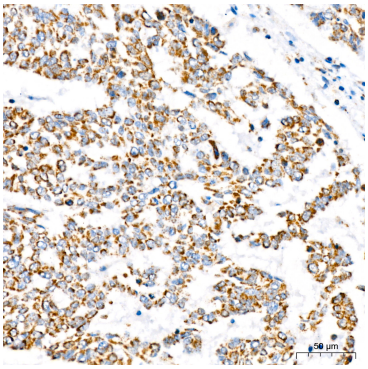
Immunohistochemistry analysis of paraffin-embedded Human colon carcinoma tissue using ATP5A1 Rabbit mAb (A11217) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



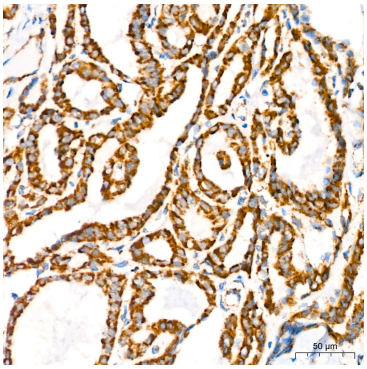
Immunohistochemistry analysis of paraffin-embedded Human kidney tissue using ATP5A1 Rabbit mAb (A11217) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Human liver cancer tissue using



Immunohistochemistry analysis of paraffin-embedded Human lung squamous carcinoma



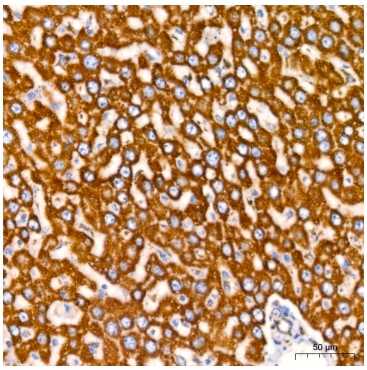
Immunohistochemistry analysis of paraffin-embedded Human thyroid cancer tissue

Validation Data

ATP5A1 Rabbit mAb (A11217) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.

tissue using ATP5A1 Rabbit mAb (A11217) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.

using ATP5A1 Rabbit mAb (A11217) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Rat liver tissue using ATP5A1 Rabbit mAb (A11217) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.