

ATP5A1 Rabbit pAb

Catalog No.: A5884SP

22 Publications

Basic Information

Observed MW

60 kDa

Calculated MW

60 kDa/54 kDa/58 kDa

Category

Primary antibody

Applications

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

Cross-Reactivity

Human, Mouse, Rat

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 1:1000 - 1:3000**IP** 0.5 µg - 4 µg antibody for
400 µg - 600 µg extracts of
whole cells**IF/ICC** 1:200 - 1:2000**IF-P** 1:200 - 1:800**IHC-P** 1:200 - 1:2000**ELISA** Recommended starting
concentration is 1 µg/mL.
Please optimize the
concentration based on your
specific assay requirements.
For high-ratio antibody
dilutions (≥1:10000) a
sequential dilution method
is strongly recommended to
ensure measurement
accuracy.

Immunogen Information

Gene ID

498

Swiss Prot

P25705

Immunogen

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°C. Avoid freeze / thaw cycles.

Buffer: PBS, pH 7.3, containing 50% glycerol. Preserved with Proclin300 or sodium azide.

May contain 0.05% BSA as specified on the Certificate of Analysis.

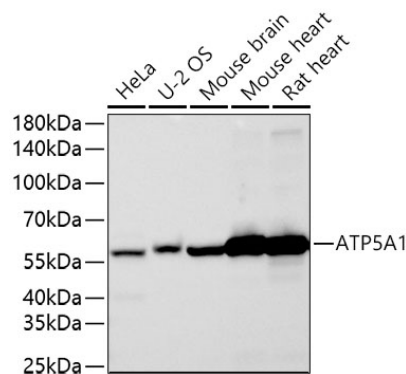
Contact

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Validation Data



Western blot analysis of various lysates using ATP5A1 Rabbit pAb (A5884SP) at 1:1000 dilution incubated overnight at 4°C.

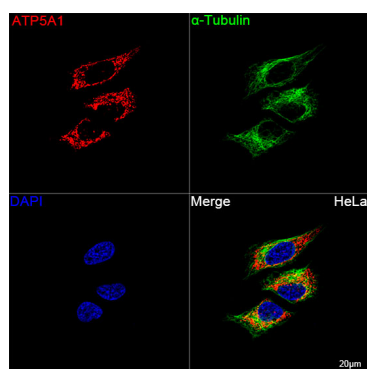
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25 µg per lane.

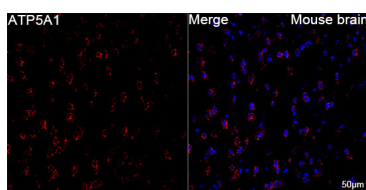
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

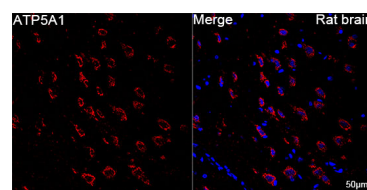
Exposure time: 45 s.



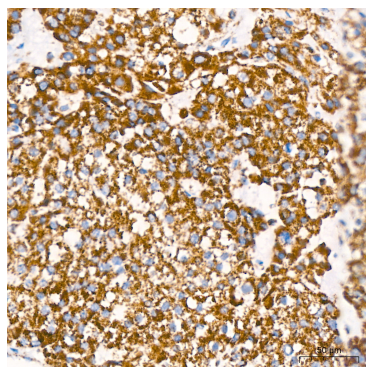
Confocal imaging of HeLa cells using ATP5A1 Rabbit pAb (A5884SP, dilution 1:200) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α-Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) (AS037, dilution 1:800) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.



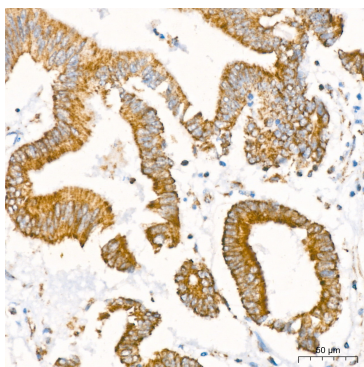
Confocal imaging of paraffin-embedded Mouse brain tissue using ATP5A1 Rabbit pAb (A5884SP, dilution 1:200) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Perform microwave antigen retrieval with 0.01 M citrate buffer (pH 6.0) prior to IF staining. Objective: 40x.



Confocal imaging of paraffin-embedded Rat brain tissue using ATP5A1 Rabbit pAb (A5884SP, dilution 1:200) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Perform microwave antigen retrieval with 0.01 M citrate buffer (pH 6.0) prior to IF staining. Objective: 40x.



Immunohistochemistry analysis of paraffin-embedded Human liver cancer tissue using ATP5A1 Rabbit pAb (A5884SP) at a 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 colon carcinoma tissue using ATP5A1 Rabbit pAb (A5884SP) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IHC staining.