

ATP5H Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5527

Specification

ATP5H Antibody (Center) - Product Information

Application	WB, IHC-P, FC,E
Primary Accession	O75947
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	H=18;M=19;R=19 KDa
Isotype	Rabbit IgG
Antigen Source	HUMAN

ATP5H Antibody (Center) - Additional Information

Gene ID 10476

Antigen Region
68-97

Other Names
ATP synthase subunit d, mitochondrial, ATPase subunit d, ATP5H

Dilution
WB~~1:1000
IHC-P~~1:50~100
FC~~1:10~50

Target/Specificity
This ATP5H antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 68-97 amino acids from the Central region of human ATP5H.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
ATP5H Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

ATP5H Antibody (Center) - Protein Information

Name ATP5PD ([HGNC:845](#))

Synonyms ATP5H

Function

Mitochondrial membrane ATP synthase (F(1)F(0) ATP synthase or Complex V) produces ATP from ADP in the presence of a proton gradient across the membrane which is generated by electron transport complexes of the respiratory chain. F-type ATPases consist of two structural domains, F(1) - containing the extramembraneous catalytic core, and F(0) - containing the membrane proton channel, linked together by a central stalk and a peripheral stalk. During catalysis, ATP synthesis in the catalytic domain of F(1) is coupled via a rotary mechanism of the central stalk subunits to proton translocation. Part of the complex F(0) domain and the peripheral stalk, which acts as a stator to hold the catalytic alpha(3)beta(3) subcomplex and subunit a/ATP6 static relative to the rotary elements.

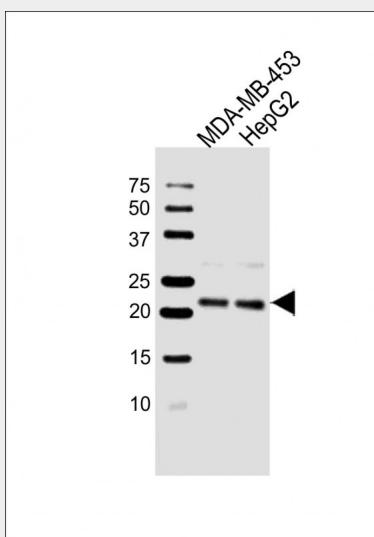
Cellular Location

Mitochondrion. Mitochondrion inner membrane.

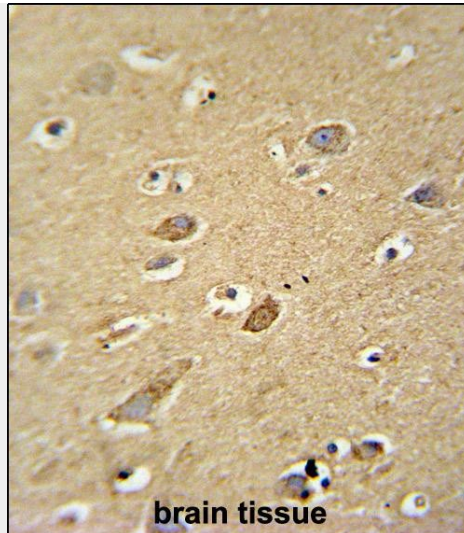
ATP5H Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

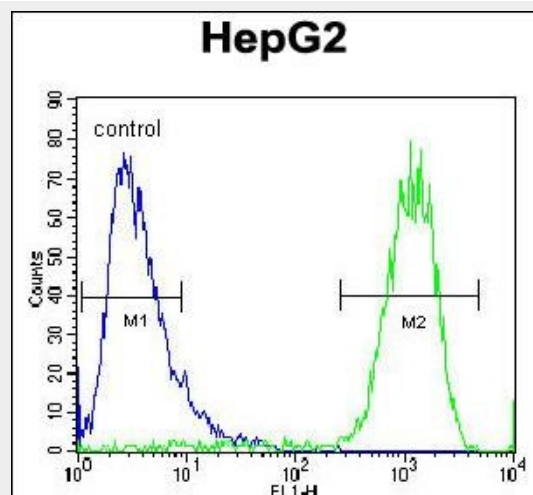
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

ATP5H Antibody (Center) - Images

All lanes : Anti-ATP5H Antibody (Center) at 1:1000 dilution Lane 1: MDA-MB-453 whole cell lysate Lane 2: HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 18 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



ATP5H antibody (Center) (Cat. #AW5527) immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the ATP5H antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



ATP5H Antibody (Center) (Cat. #AW5527) flow cytometric analysis of HepG2 cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

ATP5H Antibody (Center) - Background

Mitochondrial ATP synthase catalyzes ATP synthesis, utilizing an electrochemical gradient of protons across the inner membrane during oxidative phosphorylation. It is composed of two linked multi-subunit complexes: the soluble catalytic core, F1, and the membrane-spanning component, Fo, which comprises the proton channel. The F1 complex consists of 5 different subunits (alpha, beta, gamma, delta, and epsilon) assembled in a ratio of 3 alpha, 3 beta, and a single representative of the other 3. The Fo seems to have nine subunits (a, b, c, d, e, f, g, F6 and 8). This gene encodes the d subunit of the Fo complex. Alternatively spliced transcript variants encoding different isoforms have been identified for this gene. In addition, three pseudogenes are located on chromosomes 9, 12 and 15.

ATP5H Antibody (Center) - References

Martins-de-Souza, D., et al. J Psychiatr Res 43(11):978-986(2009) Kim, D.W., et al. Cancer Sci.

99(10):1884-1891(2008) Cross, R.L. Nature 427(6973):407-408(2004) Oster, G., et al. Trends Cell Biol. 13(3):114-121(2003) Leyva, J.A., et al. Mol. Membr. Biol. 20(1):27-33(2003)