

ATP5H Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10185c**Specification**

ATP5H Antibody (Center) - Product Information

Application	WB, IHC-P, FC,E
Primary Accession	O75947
Other Accession	P13620 , NP_001003785.1 , NP_006347.1
Reactivity	Human
Predicted	Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	18491
Antigen Region	68-97

ATP5H Antibody (Center) - Additional Information**Gene ID** 10476**Other Names**

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

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.

Dilution

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

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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.

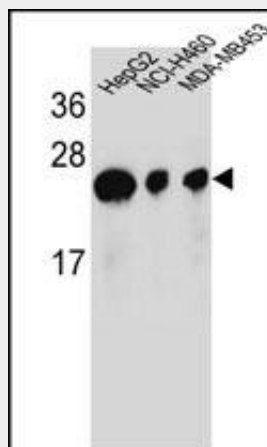
Cellular Location

Mitochondrion. Mitochondrion inner membrane.

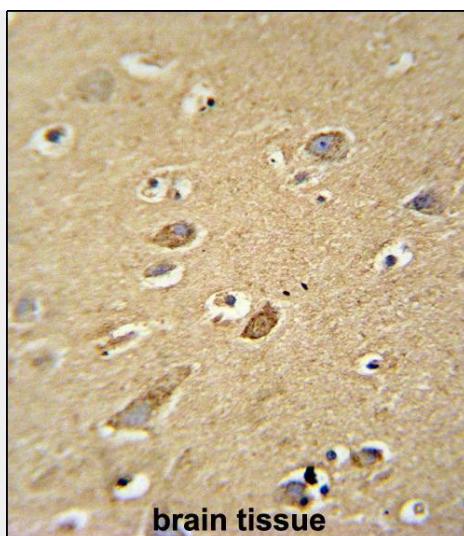
ATP5H Antibody (Center) - Protocols

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

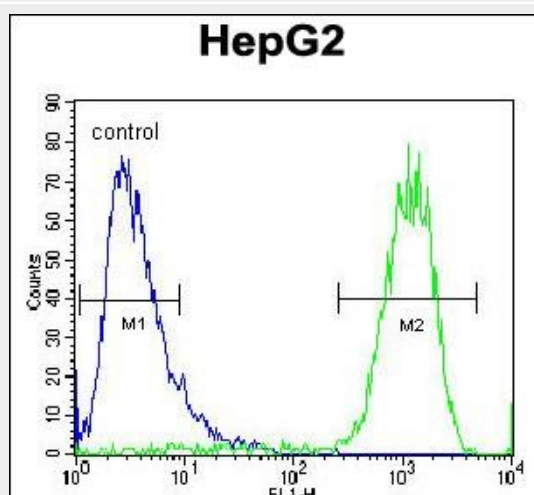
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

ATP5H Antibody (Center) - Images

ATP5H Antibody (Center) (Cat. #AP10185c) western blot analysis in HepG2, NCI-H460, MDA-MB453 cell line lysates (35ug/lane). This demonstrates the ATP5H antibody detected the ATP5H protein (arrow).



ATP5H antibody (Center) (Cat. #AP10185c) 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. #AP10185c) 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, F_o, 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 F_o seems to have nine subunits (a, b, c, d, e, f, g, F6 and 8). This gene encodes the d subunit of the F_o 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)