

ATP5B / ATP Synthase Beta Antibody
Rabbit Polyclonal Antibody
Catalog # ALS17247**Specification**

ATP5B / ATP Synthase Beta Antibody - Product Information

Application	IHC-P, WB
Primary Accession	P06576
Other Accession	506
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	56560

ATP5B / ATP Synthase Beta Antibody - Additional Information**Gene ID** 506**Other Names**

ATP5B, ATPMB, ATPSB, Beta-mtATPase, F0F1-ATP synthase beta subunit, ATP synthase beta subunit

Target/Specificity

Human ATP5B / ATP Synthase Beta.

Reconstitution & Storage

PBS, pH 7.3, 0.02% sodium azide, 50% glycerol. Long term: -80°C; Short term: -20°C. Avoid freeze-thaw cycles.

Precautions

ATP5B / ATP Synthase Beta Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

ATP5B / ATP Synthase Beta Antibody - Protein Information**Name** ATP5F1B ([HGNC:830](#))**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. Subunits alpha and beta form the catalytic core in F(1). Rotation of the central stalk against the surrounding alpha(3)beta(3) subunits leads to hydrolysis of ATP in three separate catalytic sites on the beta subunits.

Cellular Location

Mitochondrion inner membrane; Peripheral membrane protein {ECO:0000250|UniProtKB:P00829}; Matrix side {ECO:0000250|UniProtKB:P00829, ECO:0000269|PubMed:25168243}

Volume

50 µl

ATP5B / ATP Synthase Beta Antibody - Protocols

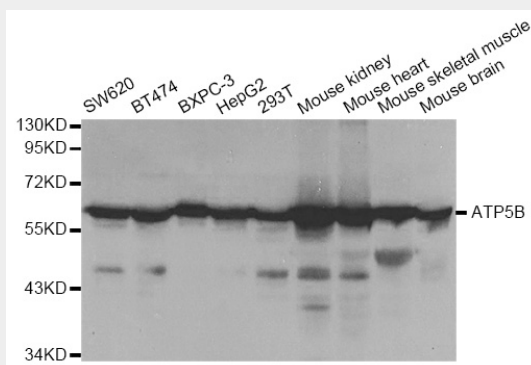
Provided below are standard protocols that you may find useful for product applications.

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

ATP5B / ATP Synthase Beta Antibody - Images



Human Heart: Formalin-Fixed, Paraffin-Embedded (FFPE)



Western blot analysis of extracts of various cell lines, using ATP5B antibody.

ATP5B / ATP Synthase Beta Antibody - Background

Mitochondrial membrane ATP synthase (F₁F₀) 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, F₁

- 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. Subunits alpha and beta form the catalytic core in F(1). Rotation of the central stalk against the surrounding alpha(3)beta(3) subunits leads to hydrolysis of ATP in three separate catalytic sites on the beta subunits.

ATP5B / ATP Synthase Beta Antibody - References

Neckelmann N., et al. Genomics 5:829-843(1989).
Ohta S., et al. J. Biol. Chem. 263:11257-11262(1988).
Ohta S., et al. J. Biochem. 99:135-141(1986).
Ota T., et al. Nat. Genet. 36:40-45(2004).
Mural R.J., et al. Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.