

ATP5D Antibody
Rabbit Polyclonal Antibody
Catalog # ALS16863**Specification**

ATP5D Antibody - Product Information

Application	IHC
Primary Accession	P30049
Other Accession	513
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	17490

ATP5D Antibody - Additional Information**Gene ID** 513**Other Names**

ATP5D, F-ATPase delta subunit

Target/Specificity

Human ATP5D

Reconstitution & Storage

PBS, pH 7.4, 0.03% Proclin 300, 50% glycerol. Aliquot and store at -20°C or -80°C. Avoid freeze-thaw cycles.

Precautions

ATP5D Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

ATP5D Antibody - Protein Information**Name** ATP5F1D ([HGNC:837](#))**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 (PubMed:29478781). 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 turnover 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(1) domain and of the central stalk which is part of the complex rotary element. 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 (PubMed:1531933).

Cellular Location

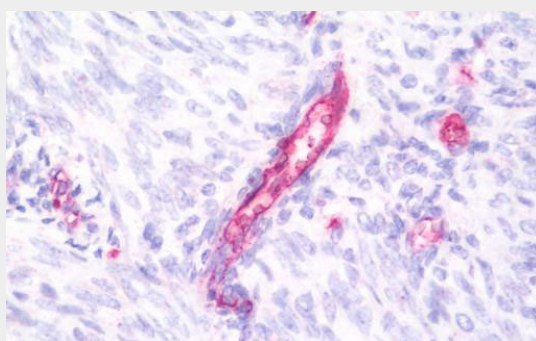
Mitochondrion. Mitochondrion inner membrane.

ATP5D 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](#)

ATP5D Antibody - Images



Anti-ATP5D antibody IHC staining of human uterus, endometrium.

ATP5D 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 F₀ - containing the membrane proton channel, linked together by a central stalk and a peripheral stalk. During catalysis, ATP turnover in the catalytic domain of F₁ is coupled via a rotary mechanism of the central stalk subunits to proton translocation. Part of the complex F₁ domain and of the central stalk which is part of the complex rotary element. 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.

ATP5D Antibody - References

Jordan E.M., et al. Biochim. Biophys. Acta 1130:123-126(1992).
Halleck A., et al. Submitted (JUN-2004) to the EMBL/GenBank/DBJ databases.
Grimwood J., et al. Nature 428:529-535(2004).
Mural R.J., et al. Submitted (SEP-2005) to the EMBL/GenBank/DBJ databases.
Hochstrasser D.F., et al. Electrophoresis 13:992-1001(1992).