

ATP5E Antibody (clone 2F3)

Mouse Monoclonal Antibody Catalog # ALS13279

Specification

ATP5E Antibody (clone 2F3) - Product Information

Application WB, IHC
Primary Accession P56381
Reactivity Human
Host Mouse
Clonality Monoclonal
Calculated MW 6kDa KDa

ATP5E Antibody (clone 2F3) - Additional Information

Gene ID 514

Other Names

ATP synthase subunit epsilon, mitochondrial, ATPase subunit epsilon, ATP5E

Reconstitution & Storage

Store at -20°C. Aliquot to avoid freeze/thaw cycles.

Precautions

ATP5E Antibody (clone 2F3) is for research use only and not for use in diagnostic or therapeutic procedures.

ATP5E Antibody (clone 2F3) - Protein Information

Name ATP5F1E (HGNC:838)

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(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 (By similarity).

Cellular Location

Mitochondrion. Mitochondrion inner membrane.

Tissue Location

Ubiquitous.

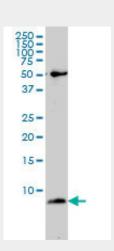


ATP5E Antibody (clone 2F3) - Protocols

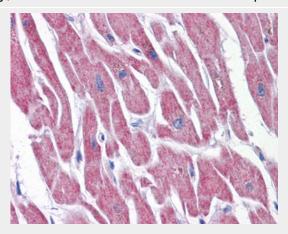
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

ATP5E Antibody (clone 2F3) - Images



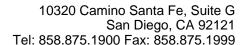
ATP5E monoclonal antibody, clone 2F3 Western blot of ATP5E expression in SW-13.



Anti-ATP5E antibody IHC of human heart.

ATP5E Antibody (clone 2F3) - Background

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(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 (By

similarity).

ATP5E Antibody (clone 2F3) - References

Tu Q.,et al.Biochem. J. 347:17-21(2000). Hu R.-M.,et al.Proc. Natl. Acad. Sci. U.S.A. 97:9543-9548(2000). Ota T.,et al.Nat. Genet. 36:40-45(2004). Kalnine N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases. Deloukas P.,et al.Nature 414:865-871(2001).