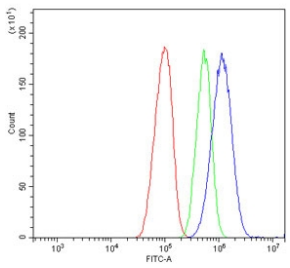
ATP5MC1/2/3 Antibody [clone 12E9.] (RQ6294)

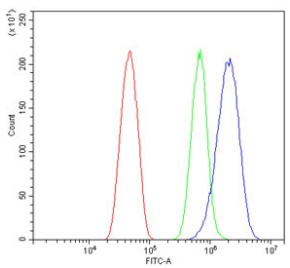
Catalog No.	Formulation	Size
RQ6294	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

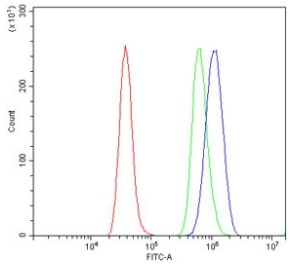
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat, Monkey
Format	Antigen affinity purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b
Clone Name	12E9.
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P05496
Applications	Western Blot : 1-2ug/ml Flow Cytometry : 1-3ug/million cells
Limitations	This ATP5MC1/2/3 antibody is available for research use only.



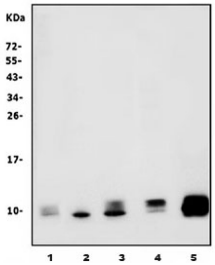
Flow cytometry testing of human HepG2 cells with ATP5MC1/2/3 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= ATP5MC1/2/3 antibody.



Flow cytometry testing of mouse HEPA1-6 cells with ATP5MC1/2/3 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= ATP5MC1/2/3 antibody.



Flow cytometry testing of rat RH35 cells with ATP5MC1/2/3 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= ATP5MC1/2/3 antibody.



Western blot testing of 1) human HL60, 2) monkey COS-7, 3) rat kidney, 4) rat heart and 5) mouse heart lysate with ATP5MC1/2/3 antibody. Predicted molecular weight: 10-14 kDa.

Description

The ATP5MC1 gene is one of three human paralogs that encode membrane subunit c of the mitochondrial ATP synthase. It is mapped to 17q21.32. This gene encodes a subunit of mitochondrial ATP synthase. Mitochondrial ATP synthase catalyzes ATP synthesis, utilizing an electrochemical gradient of protons across the inner membrane during oxidative phosphorylation. ATP synthase is composed of two linked multi-subunit complexes: the soluble catalytic core, F1, and the membrane-spanning component, Fo, comprising the proton channel. The catalytic portion of mitochondrial ATP synthase consists of 5 different subunits (alpha, beta, gamma, delta, and epsilon) assembled with a stoichiometry of 3 alpha, 3 beta, and a single representative of the other 3. The proton channel seems to have nine subunits (a, b, c, d, e, f, g, F6 and 8). This gene is one of three genes that encode subunit c of the proton channel. Each of the three genes have distinct mitochondrial import sequences but encode the identical mature protein. Alternatively spliced transcript variants encoding the same protein have been identified.

Application Notes

Optimal dilution of the ATP5MC1/2/3 antibody should be determined by the researcher.

Immunogen

A human recombinant partial protein (amino acids D62-L113) was used as the immunogen for the ATP5MC1/2/3 antibody.

Storage

After reconstitution, the ATP5MC1/2/3 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.