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ATP5A (ANT0055R) Rabbit mAb

CatalogNo: ANT8161 Recombinant R

Formulation: PBS,50%glycerol,0.05%Proclin 300,0.05%BSA

Quantity: 100 ug/vial

Host Species Reactivity Applications

Rabbit
 Human, Mouse, Rat,
 WB, IHC, IF, IP, ELISA

MW Isotype

• 60kD (Calculated) • IgG,Kappa

55kD (Observed)

Recommended Dilution Ratios

IHC 1:200-1:1000 WB 1:2000-1:10000 IF 1:200-1:1000

ELISA 1:5000-1:20000

IP 1:50-1:200

Storage

Storage* -15°C to -25°C/1 year(Do not lower than -25°C)

Basic Information

Clonality Monoclonal

Clone Number ANT0055R

Target Information

Immunogen Information Specificity

Endogenous

Gene name ATP5A1

Protein Name ATP synthase subunit alpha mitochondrial

Organism	Gene ID	UniProt ID
Human	<u>498</u> ;	<u>P25705</u> ;
Mouse	<u>11946</u> ;	<u>Q03265</u> ;
Rat	<u>65262</u> ;	<u>P15999</u> ;

Cellular

Mitochondrion

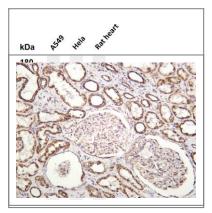
Localization

Tissue specificity Fetal lung, heart, liver, gut and kidney. Expressed at higher levels in the fetal brain, retina and spinal cord.

Function

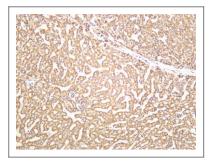
Function: Mitochondrial membrane ATP synthase (F(1)F(0) ATP synthase or Complex V) produces ATP from ADP in the presence of a proton gradient across the membrane which is generated by electron transport complexes of the respiratory chain. F-type ATPases consist of two structural domains, F(1) - containing 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. Subunit alpha does not bear the catalytic high-affinity ATPbinding sites.,ANTM:The N-terminus is blocked.,similarity:Belongs to the ATPase alpha/beta chains family.,subcellular location:Peripheral membrane protein.,subunit:F-type ATPases have 2 components, CF(1) - the catalytic core - and CF(0) - the membrane proton channel. CF(1) has five subunits: alpha(3), beta(3), gamma(1), delta(1), epsilon(1). CF(0) has three main subunits: a, b and c. Interacts with ATPAF2.,tissue specificity:Fetal lung, heart, liver, gut and kidney. Expressed at higher levels in the fetal brain, retina and spinal cord.,

Validation Data

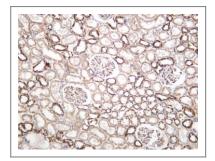


Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-ATP5A (ANT0055R) antibody. The HRPconjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: A549 Lane 2: Hela Lane 3: Rat heart Predicted band size:

60kDa Observed band size: 55kDa Human kidney was stained with anti-ATP5A (ANT0055R) rabbit antibody



Human liver was stained with anti-ATP5A (ANT0055R) rabbit antibody



Rat kidney was stained with anti-ATP5A (ANT0055R) rabbit antibody

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