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Anti-ATP5H Picoband Antibody

Catalog # ABO12019

Product Information

Application	WB, IHC-P, ICC
Primary Accession	O75947
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for ATP synthase subunit d, mitochondrial(ATP5H) detection. Tested with WB, IHC-P, ICC in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	10476
Other Names	ATP synthase subunit d, mitochondrial, ATPase subunit d, ATP5H
Calculated MW	18491
Application Details	Immunocytochemistry , 0.5-1 □g/ml Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, By Heat Western blot, 0.1-0.5 □g/ml
Subcellular Localization	Mitochondrion. Mitochondrion inner membrane.
Source	Eukaryota
Protein Name	ATP synthase subunit d, mitochondrial
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	E.coli-derived human ATP5H recombinant protein (Position: A2-L161). Human ATP5H shares 81% and 78% amino acid (aa) sequence identity with mouse and rat ATP5H, respectively.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

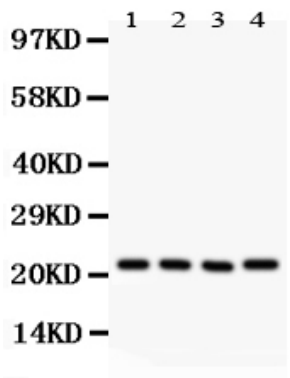
Protein Information

Name	ATP5PD (HGNC:845)
Synonyms	ATP5H
Function	Subunit d, of the mitochondrial membrane ATP synthase complex (F(1)F(0) ATP synthase or Complex V) that 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:37244256). ATP synthase complex consist of a soluble F(1) head domain - the catalytic core - and a membrane F(1) domain - the membrane proton channel (PubMed:37244256). These two domains are linked by a central stalk rotating inside the F(1) region and a stationary peripheral stalk (PubMed:37244256). 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 (Probable). In vivo, can only synthesize ATP although its ATP hydrolase activity can be activated artificially in vitro (By similarity). Part of the complex F(0) domain (PubMed:37244256). Part of the complex F(0) domain and the peripheric stalk, which acts as a stator to hold the catalytic alpha(3)beta(3) subcomplex and subunit a/ATP6 static relative to the rotary elements (By similarity).
Cellular Location	Mitochondrion. Mitochondrion inner membrane.

Background

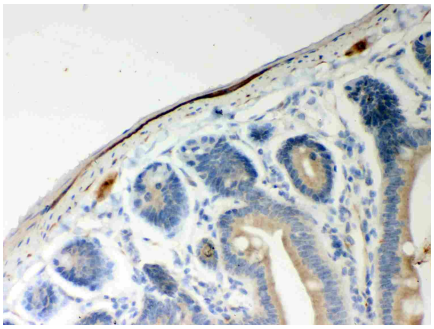
ATP5H is also known as ATPQ. Mitochondrial ATP synthase catalyzes ATP synthesis, utilizing an electrochemical gradient of protons across the inner membrane during oxidative phosphorylation. It is composed of two linked multi-subunit complexes: the soluble catalytic core, F1, and the membrane-spanning component, Fo, which comprises the proton channel. The F1 complex consists of 5 different subunits (alpha, beta, gamma, delta, and epsilon) assembled in a ratio of 3 alpha, 3 beta, and a single representative of the other 3. The Fo seems to have nine subunits (a, b, c, d, e, f, g, F6 and 8). This gene encodes the d subunit of the Fo complex. Alternatively spliced transcript variants encoding different isoforms have been identified for this gene. In addition, three pseudogenes are located on chromosomes 9, 12 and 15.

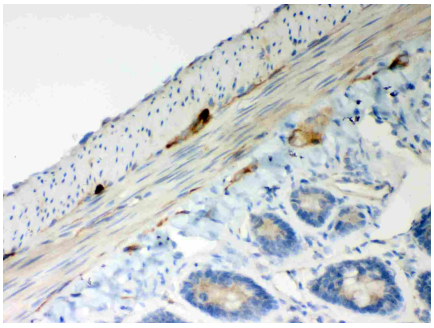
Images



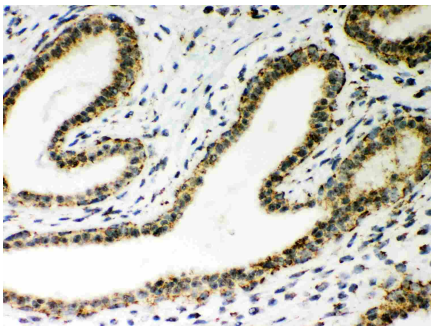
Anti- ATP5H Picoband antibody, ABO12019, Western blottingAll lanes: Anti ATP5H (ABO12019) at 0.5ug/mlLane 1: Rat Brain Tissue Lysate at 50ugLane 2: Mouse Brain Tissue Lysate at 50ugLane 3: Human Placenta Tissue Lysate at 50ugLane 4: HELA Whole Cell Lysate at 40ugPredicted bind size: 22KDObserved bind size: 22KD

Anti- ATP5H Picoband antibody, ABO12019,IHC(P)IHC(P): Mouse Intestine Tissue

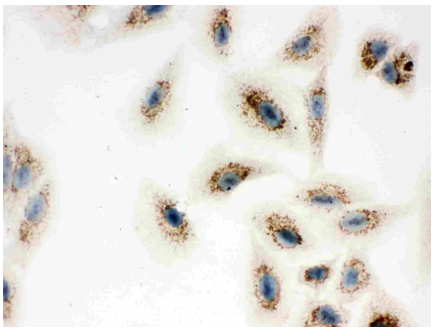




Anti- ATP5H Picoband antibody, ABO12019,IHC(P)IHC(P): Rat Intestine Tissue



Anti- ATP5H Picoband antibody, ABO12019,IHC(P)IHC(P): Human Mammary Cancer Tissue



Anti- ATP5H Picoband antibody, ABO12019,ICCICC: A549 Cell

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.