ARG55558
anti-ATP5B antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes ATP5B
Tested Reactivity	Hu
Predict Reactivity	Ms, Rat, Bov
Tested Application	FACS, ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	ATP5B
Species	Human
Immunogen	KLH-conjugated synthetic peptide corresponding to aa. 135-163 (Center) of Human ATP5B.
Conjugation	Un-conjugated
Alternate Names	ATPMB; ATPSB; EC 3.6.3.14; HEL-S-271; ATP synthase subunit beta, mitochondrial

Application Instructions

Application table

Application	Dilution
FACS	1:10 - 1:50
ICC/IF	1:25
IHC-P	1:50 - 1:100
WB	1:1000

Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Positive Control	WiDr

Properties

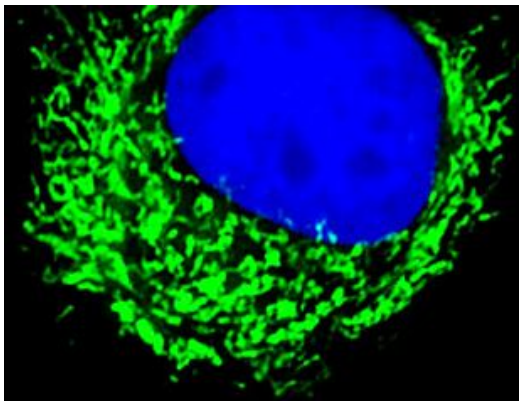
Form	Liquid
Purification	Purification with Protein A and immunogen peptide.
Buffer	PBS and 0.09% (W/V) Sodium azide
Preservative	0.09% (W/V) Sodium azide
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

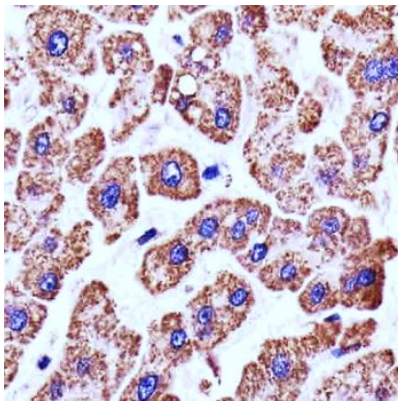
Database links	GeneID: 506 Human Swiss-port # P06576 Human
Gene Symbol	ATP5B
Gene Full Name	ATP synthase, H+ transporting, mitochondrial F1 complex, beta polypeptide
Background	This gene encodes a subunit of mitochondrial ATP synthase. Mitochondrial ATP synthase catalyzes ATP synthesis, utilizing an 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 consists of three main subunits (a, b, c). This gene encodes the beta subunit of the catalytic core. [provided by RefSeq, Jul 2008]
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. [UniProt]
Research Area	Controls and Markers antibody; Metabolism antibody; Signaling Transduction antibody
Calculated Mw	57 kDa
Cellular Localization	Mitochondrion. Mitochondrion inner membrane. Note=Peripheral membrane protein

Images



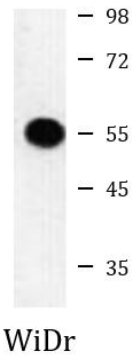
ARG55558 anti-ATP5B antibody ICC/IF image

Immunofluorescence: SK-BR-3 cells stained with ARG55558 anti-ATP5B antibody (green) at 1:25 dilution. DAPI (blue) for nuclear staining.



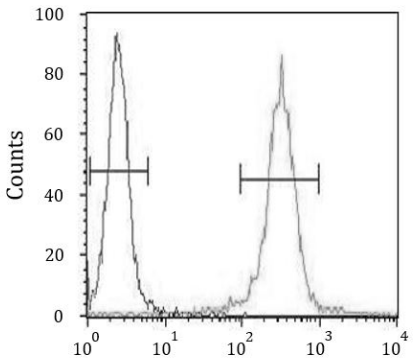
ARG55558 anti-ATP5B antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human liver section stained with ARG55558 anti-ATP5B antibody at 1:25 dilution.



ARG55558 anti-ATP5B antibody WB image

Western blot: WiDr cell lysate stained with ARG55558 anti-ATP5B antibody.



ARG55558 anti-ATP5B antibody FACS image

Flow Cytometry: WiDr cells stained with ARG55558 anti-ATP5B antibody (right histogram) or without primary antibody control (left histogram), followed by incubation with FITC labelled secondary antibody.