

## ATP5A1 Antibody

Catalog No: #34453

Package Size: #34453-1 50ul #34453-2 100ul

Orders: [order@signalwayantibody.com](mailto:order@signalwayantibody.com)Support: [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)

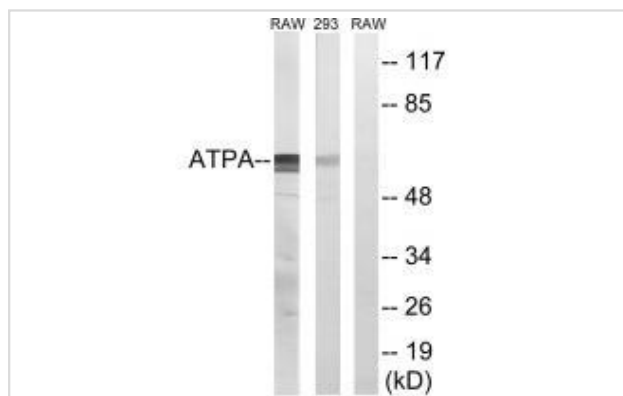
## Description

Product Name	ATP5A1 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Applications	WB
Species Reactivity	Hu Ms
Specificity	The antibody detects endogenous levels of total ATP5A1 protein.
Immunogen Type	Peptide
Immunogen Description	Synthesized peptide derived from internal of human ATP5A1.
Target Name	ATP5A1
Other Names	ATP synthase alpha chain; mitochondrial precursor; ATP5A; ATPA; EC 3.6.3.14
Accession No.	Swiss-Prot: P25705NCBI Gene ID: 498
Uniprot	P25705
GeneID	498;
SDS-PAGE MW	60kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

## Application Details

Western blotting: 1:500~1:3000

## Images



Western blot analysis of extracts from RAW264.7 cells and 293 cells, using ATP5A1 antibody #34453.

## Background

Mitochondrial membrane ATP synthase (F1F0 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, F1 - containing the extramembraneous catalytic core, and F0 - containing the membrane proton channel, linked together by a central stalk and a peripheral stalk. During catalysis, ATP synthesis in the catalytic domain of F1 is coupled via a rotary mechanism of the central stalk subunits to proton translocation. Subunits alpha and beta form the catalytic core in F1. Rotation of the central stalk against the surrounding alpha<sub>3</sub>beta<sub>3</sub> subunits leads to hydrolysis of ATP in three separate catalytic sites on the beta subunits. Subunit alpha does not bear the catalytic high-affinity ATP-binding sites. By similarity.

Kataoka H., *Biochim. Biophys. Acta* 1089:393-395(1991).

Godbout R., *Gene* 123:195-201(1993).

Akiyama S., *Biochim. Biophys. Acta* 1219:129-140(1994)

---

Note: This product is for in vitro research use only