

## Product datasheet for **AP50297PU-N**

### ATP5A (ATP5A1) (C-term) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	<b>ELISA:</b> 1/1000. <b>Western blotting:</b> 1/100 - 1/500. <b>Immunohistochemistry on paraffin sections:</b> 1/50 - 1/100.
Reactivity:	Human
Host:	Rabbit
Isotype:	Ig
Clonality:	Polyclonal
Immunogen:	KLH conjugated synthetic peptide between 483~512 amino acids from the C-terminal region of human ATP5A1
Specificity:	This antibody reacts to ATP synthase subunit alpha.
Formulation:	PBS containing 0.09% (W/V) sodium azide as preservative State: Aff - Purified State: Liquid purified Ig fraction
Concentration:	lot specific
Purification:	Affinity chromatography on Protein A
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	ATP synthase, H <sup>+</sup> transporting, mitochondrial F1 complex, alpha subunit 1, cardiac muscle
Database Link:	<a href="#">Entrez Gene 498 Human P25705</a>



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**Background:**

This gene encodes a subunit of mitochondrial ATP synthase. Mitochondrial ATP synthase catalyzes ATP synthesis, using 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, F<sub>1</sub>, and the membrane-spanning component, F<sub>o</sub>, 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 alpha subunit of the catalytic core.

**Synonyms:**

ATP5A1, ATP5A, ATP5AL2, ATPM, F<sub>1</sub>F<sub>0</sub> ATP synthase alpha subunit, Complex V alpha subunit

**Note:**

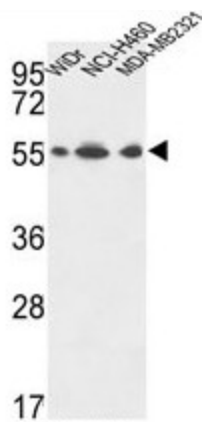
**Molecular Weight:** 59751 Da

**Protein Families:**

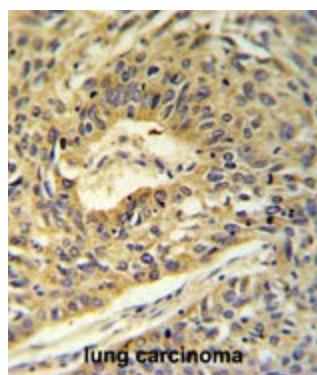
Druggable Genome

**Protein Pathways:**

Alzheimer's disease, Huntington's disease, Metabolic pathways, Oxidative phosphorylation, Parkinson's disease

**Product images:**

ATP5A1 Antibody (C-term) western blot analysis in WiDr, NCI-H460, MDA-MB231 cell line lysates (35ug/lane). This demonstrates the ATP5A1 antibody detected the ATP5A1 protein (arrow).



ATP5A1 Antibody (C-term) IHC analysis in formalin fixed and paraffin embedded lung carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the ATP5A1 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.