

**CYC1 Antibody (Center)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AW5042**

**Specification**

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**CYC1 Antibody (Center) - Product Information**

Application	IF, WB, IHC-P,E
Primary Accession	<a href="#">P08574</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	H=35;M=35,29 KDa
Isotype	Rabbit IgG
Antigen Source	HUMAN

**CYC1 Antibody (Center) - Additional Information**

**Gene ID** 1537

**Antigen Region**  
142-176

**Other Names**

Cytochrome c1, heme protein, mitochondrial, Complex III subunit 4, Complex III subunit IV, Cytochrome b-c1 complex subunit 4, Ubiquinol-cytochrome-c reductase complex cytochrome c1 subunit, Cytochrome c-1, CYC1

**Dilution**

IF~~1:25  
WB~~1:1000  
IHC-P~~1:25

**Target/Specificity**

This CYC1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 142-176 amino acids from the Central region of human CYC1.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

CYC1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

**CYC1 Antibody (Center) - Protein Information**

## Name CYC1

### Function

Component of the ubiquinol-cytochrome c oxidoreductase, a multisubunit transmembrane complex that is part of the mitochondrial electron transport chain which drives oxidative phosphorylation. The respiratory chain contains 3 multisubunit complexes succinate dehydrogenase (complex II, CII), ubiquinol-cytochrome c oxidoreductase (cytochrome b-c1 complex, complex III, CIII) and cytochrome c oxidase (complex IV, CIV), that cooperate to transfer electrons derived from NADH and succinate to molecular oxygen, creating an electrochemical gradient over the inner membrane that drives transmembrane transport and the ATP synthase. The cytochrome b-c1 complex catalyzes electron transfer from ubiquinol to cytochrome c, linking this redox reaction to translocation of protons across the mitochondrial inner membrane, with protons being carried across the membrane as hydrogens on the quinol. In the process called Q cycle, 2 protons are consumed from the matrix, 4 protons are released into the intermembrane space and 2 electrons are passed to cytochrome c. Cytochrome c1 is a catalytic core subunit containing a c-type heme. It transfers electrons from the [2Fe-2S] iron-sulfur cluster of the Rieske protein to cytochrome c.

### Cellular Location

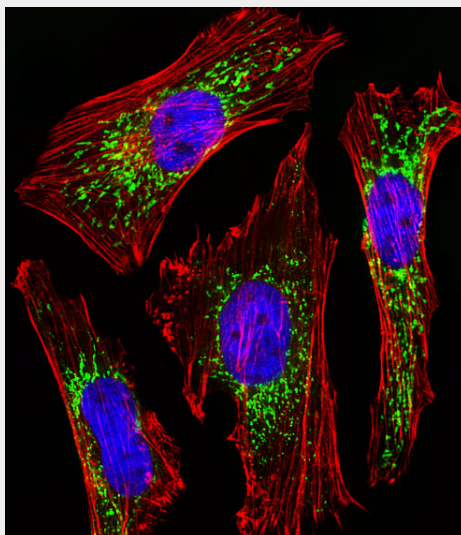
Mitochondrion inner membrane {ECO:0000250|UniProtKB:P07143}; Single-pass membrane protein {ECO:0000250|UniProtKB:P07143}

## CYC1 Antibody (Center) - Protocols

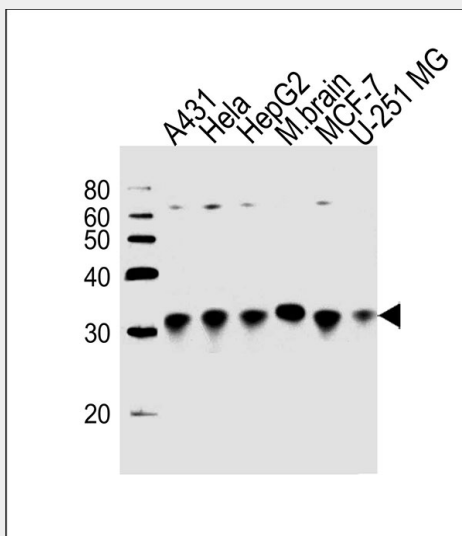
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

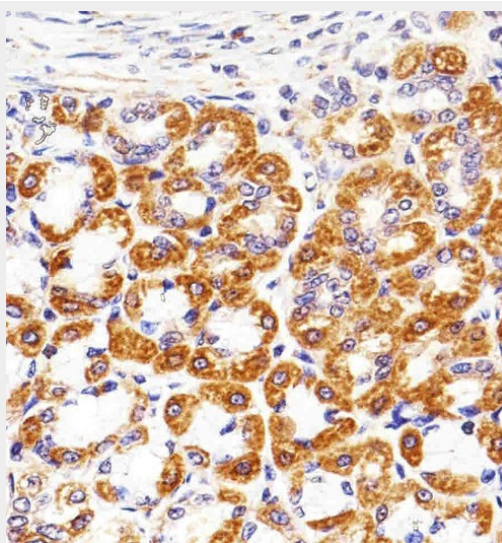
## CYC1 Antibody (Center) - Images



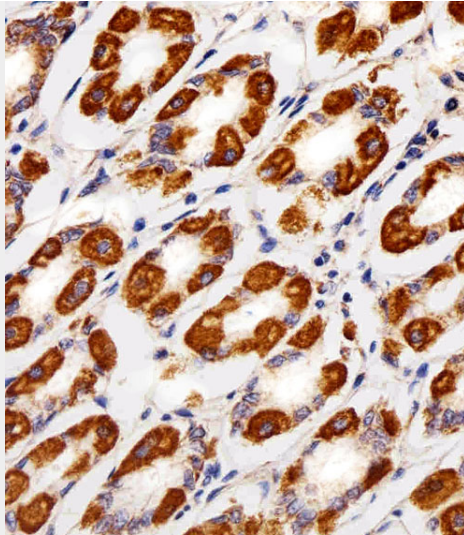
Fluorescent image of Hela cells stained with CYC1 Antibody (Center)(Cat#AW5042). AW5042 was diluted at 1:25 dilution. An Alexa Fluor 488-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody (green). DAPI was used to stain the cell nuclear (blue). Cytoplasmic actin was counterstained with Alexa Fluor® 555 conjugated with Phalloidin (red).



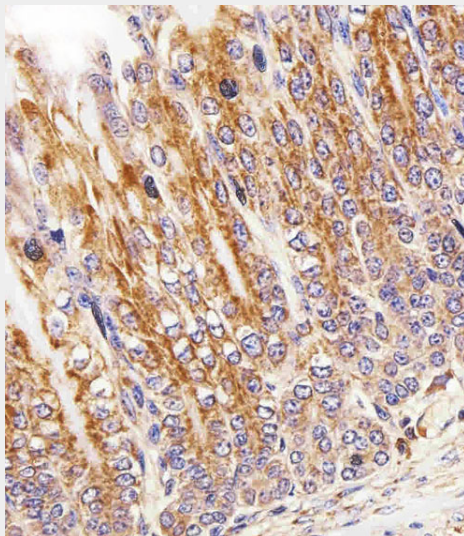
Western blot analysis of lysates from A431, Hela, HepG2 cell line, mouse brain tissue and MCF-7, U-251 MG cell line (from left to right), using CYC1 Antibody (Center)(Cat. #AW5042). AW5042 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.



Immunohistochemical analysis of paraffin-embedded R. stomach section using CYC1 Antibody (Center)(Cat#AW5042). AW5042 was diluted at 1:25 dilution. A peroxidase-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.



Immunohistochemical analysis of paraffin-embedded H. stomach section using CYC1 Antibody (Center)(C-term)(Cat#AW5042). AW5042 was diluted at 1:25 dilution. A peroxidase-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.



Immunohistochemical analysis of paraffin-embedded M. stomach section using CYC1 Antibody (Center)(Cat#AW5042). AW5042 was diluted at 1:25 dilution. A peroxidase-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.

### **CYC1 Antibody (Center) - Background**

This is the heme-containing component of the cytochrome b-c1 complex, which accepts electrons from Rieske protein and transfers electrons to cytochrome c in the mitochondrial respiratory chain.

### **CYC1 Antibody (Center) - References**

- Nishikimi M.,et al.Nucleic Acids Res. 16:3577-3577(1988).
- Suzuki H.,et al.J. Biol. Chem. 264:1368-1374(1989).
- Halleck A.,et al.Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
- Kalnine N.,et al.Submitted (OCT-2004) to the EMBL/GenBank/DDBJ databases.
- Nusbaum C.,et al.Nature 439:331-335(2006).