

## Rabbit Anti-COX4I1 antibody

SL10257R

**Product Name** COX4I1

**Chinese Name** 细胞色素 c 氧化酶 IV 亚型 1 抗体

**Alias** COX4I\_HUMAN; Cytochrome c oxidase subunit 4 isoform 1, mitochondrial; COX4; Cytochrome c oxidase polypeptide IV; Cytochrome c oxidase subunit IV isoform 1 (COX IV-1); COX-IV; COX4; COX 4; COX 4I1;

**Research Area** Cell biology immunology

**Immunogen Species** Rabbit

**Clonality** Polyclonal

**React Species** Human, Mouse, Rat, (predicted: Dog, Pig, Cow, Horse, )

**Applications** WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 (Paraffin sections need antigen repair)  
not yet tested in other applications.  
optimal dilutions/concentrations should be determined by the end user.

**Theoretical molecular weight** 17kDa

**Cellular localization** cytoplasmic The cell membrane

**Form** Liquid

**Concentration** 1mg/ml

**immunogen** KLH conjugated synthetic peptide derived from human COX4I1: 51-169/169

**Lsotype** IgG

**Purification** affinity purified by Protein A

**Buffer Solution** 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

**Storage** Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

**Attention** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

**PubMed** [PubMed](#)

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Cytochrome c oxidase (COX) is the terminal enzyme of the mitochondrial respiratory chain. It is a multi-subunit enzyme complex that couples the transfer of electrons from cytochrome c to molecular oxygen and contributes to a proton electrochemical gradient across the inner mitochondrial membrane. The complex consists of 13 mitochondrial- and nuclear-encoded subunits. The mitochondrially-encoded subunits perform the electron transfer and proton pumping activities. The functions of the nuclear-encoded subunits are unknown but they may play a role in the regulation and assembly of the complex. This gene encodes the nuclear-encoded subunit IV isoform 1 of the human mitochondrial respiratory chain enzyme. It is located at the 3' of the NOC4 (neighbor of COX4) gene in a head-to-head orientation, and shares a promoter with it. [provided by RefSeq, Jul 2008]

**Function:**

This protein is one of the nuclear-coded polypeptide chains of cytochrome c oxidase, the terminal enzyme of the mitochondrial electron transport chain.

**Subcellular Location:**

Mitochondrion inner membrane.

**Post-translational modifications:**

Ubiquitous.

**Product  
Detail**

**Similarity:**

Belongs to the cytochrome c oxidase IV family.

**SWISS:**

P13073

**Gene ID:**

1327

**Database links:**

[Entrez Gene: 1327](#) Human

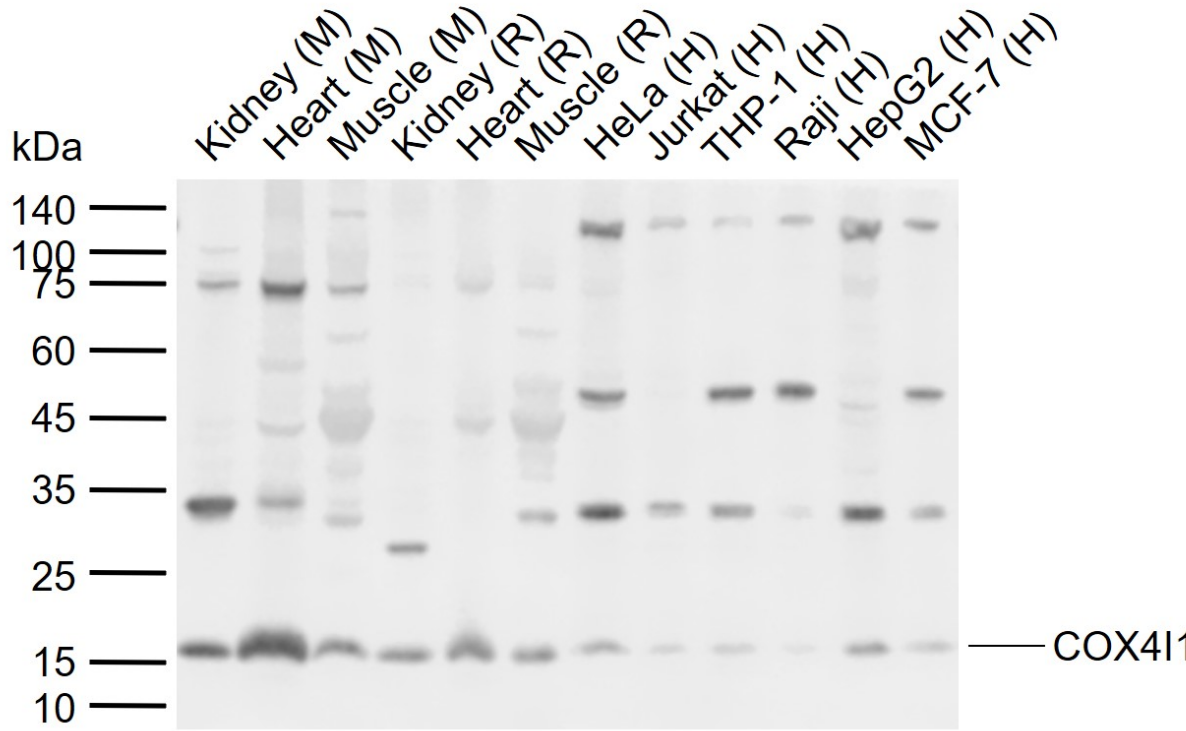
[Entrez Gene: 12857](#) Mouse

[Entrez Gene: 29445](#) Rat

[SwissProt: P13073](#) Human

[SwissProt: P19783](#) Mouse

[SwissProt: P10888](#) Rat



**Product  
Picture**

Sample:

Lane 1: Mouse Kidney tissue lysates

Lane 2: Mouse Heart tissue lysates

Lane 3: Mouse Muscle tissue lysates

Lane 4: Rat Kidney tissue lysates

Lane 5: Rat Heart tissue lysates

Lane 6: Rat Muscle tissue lysates

Lane 7: Human HeLa cell lysates

Lane 8: Human Jurkat cell lysates

Lane 9: Human THP-1 cell lysates

Lane 10: Human Raji cell lysates

Lane 11: Human HepG2 cell lysates

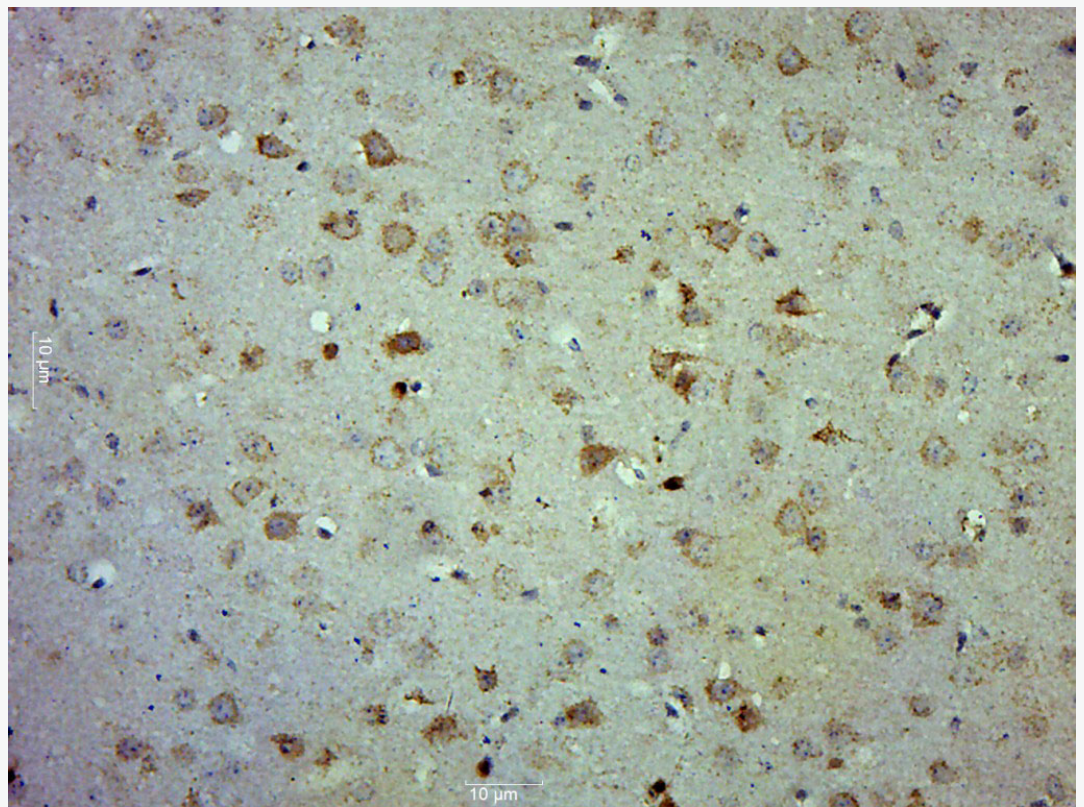
Lane 12: Human MCF-7 cell lysates

Primary: Anti-COX4I1 (SL10257R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

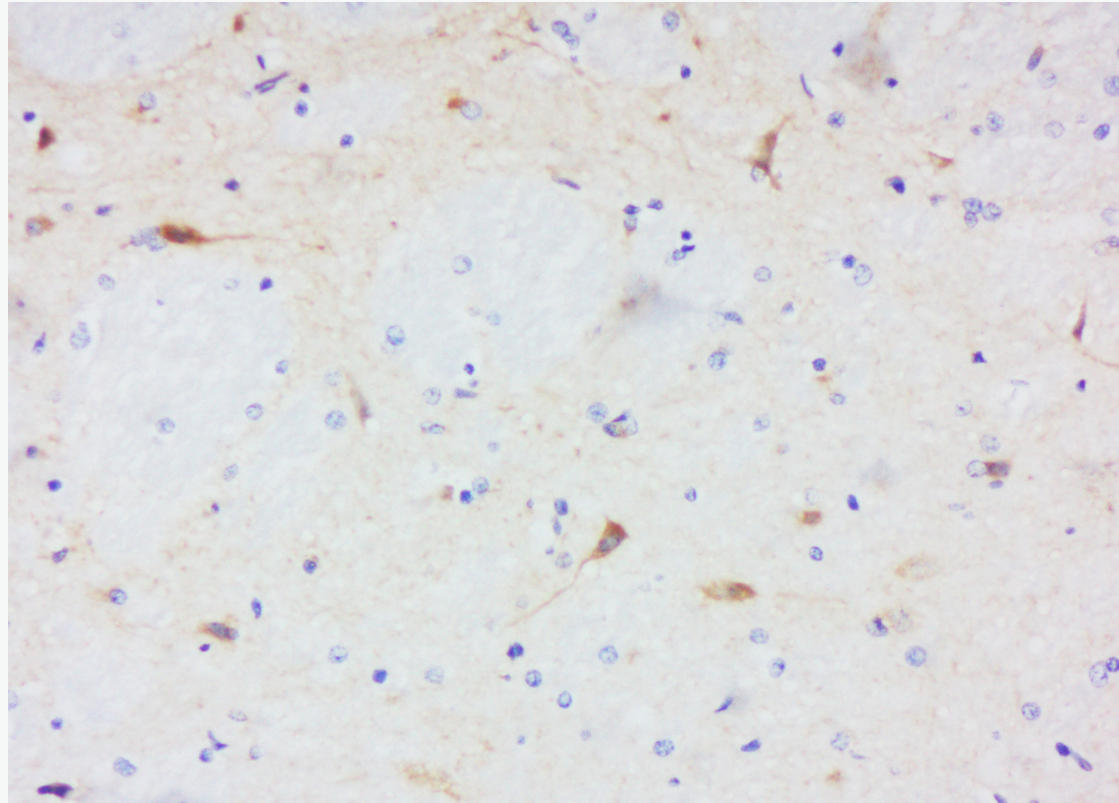
Predicted band size: 17 kDa

Observed band size: 16 kDa

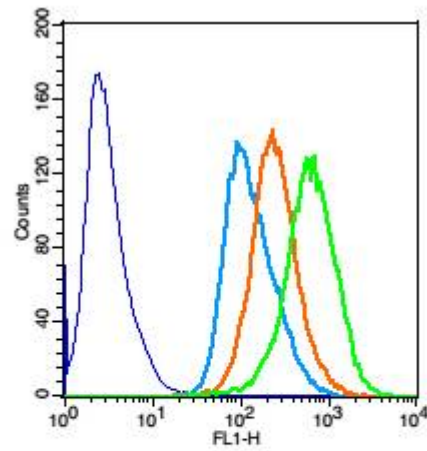


Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide.

for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (COX4) Polyclonal Antibody, Unconjugated (SL10257R) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Tissue/cell: Rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;  
Antigen retrieval: citrate buffer ( 1M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) 37°C for 20 min;  
Incubation: Anti-COX4 Polyclonal Antibody, Unconjugated(SL10257R) 1:200, overnight at 4°C followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Key	Name	Parameter	Gate
—	Hela-blank-20150604.021	FL1-H	G1
—	bs-0295G-FITC-Hela-5.036	FL1-H	G1
—	bs-0295P-(FITC)-Hela-5.037	FL1-H	G1
—	bs-10257R-(FITC)-Hela-5.044	FL1-H	G1

Positive control: Hela cells

Concentration:  $5\mu\text{g}/10^6$  cells

Incubation conditions: Avoid light , 30 minutes on the ice.