

**bs-10257R****[ Primary Antibody ]****COX4I1 Rabbit pAb****Bioss**  
**ANTIBODIES**

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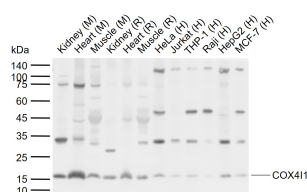
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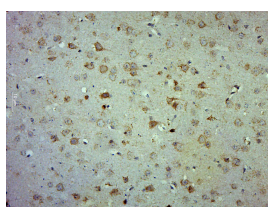
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**DATASHEET**

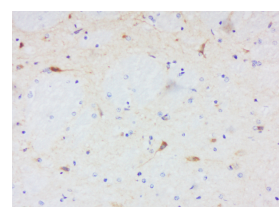
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|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Host:</b> Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>Isotype:</b> IgG  | <b>Applications:</b> WB (1:500-2000)<br><b>IHC-P</b> (1:100-500)<br><b>IHC-F</b> (1:100-500)<br><b>IF</b> (1:100-500)<br><br><b>Reactivity:</b> Human, Mouse, Rat<br>(predicted: Pig, Cow, Dog, Horse)<br><br><b>Predicted MW.:</b> 17 kDa<br><br><b>Observed MW.:</b> 16 kDa<br><br><b>Subcellular Location:</b> Cytoplasm |
| <b>Clonality:</b> Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                      |                                                                                                                                                                                                                                                                                                                             |
| <b>GeneID:</b> 1327                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>SWISS:</b> P13073 |                                                                                                                                                                                                                                                                                                                             |
| <b>Target:</b> COX4I1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                      |                                                                                                                                                                                                                                                                                                                             |
| <b>Immunogen:</b> KLH conjugated synthetic peptide derived from human COX4I1: 51-169/169.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                      |                                                                                                                                                                                                                                                                                                                             |
| <b>Purification:</b> affinity purified by Protein A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                      |                                                                                                                                                                                                                                                                                                                             |
| <b>Concentration:</b> 1mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                      |                                                                                                                                                                                                                                                                                                                             |
| <b>Storage:</b> 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.<br>Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                      |                                                                                                                                                                                                                                                                                                                             |
| <b>Background:</b> 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] |                      |                                                                                                                                                                                                                                                                                                                             |

**VALIDATION IMAGES**

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 (bs-10257R) 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 (bs-10257R) 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 (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Incubation: Anti-COX4 Polyclonal Antibody, Unconjugated(bs-10257R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

**SELECTED CITATIONS**

- **[IF=14.5]** Xudong Xing, et al. Functional annotation map of natural compounds in traditional Chinese medicines library: TCMs with myocardial protection as a case. ACTA PHARM SIN B. 2023 Jun; WB ;Rat. 10.1016/j.apsb.2023.06.002

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

- **[IF=5.48]** Wu, Bin, et al. "Succinate-induced neuronal mitochondrial fission and hexokinase II malfunction in ischemic stroke: Therapeutical effects of kaempferol." *Biochimica et Biophysica Acta (BBA)-Molecular Basis of Disease* (2017). WB ;="Mouse". 28634116
- **[IF=4.427]** Wang Y et al. Fine particulate matter induces mitochondrial dysfunction and oxidative stress in human SH-SY5Y cells. (2018) *Chemosphere*;218:577-588. WB ;. 30502696
- **[IF=3.83]** Kouam et al. Induction of Mkp-1 and Nuclear Translocation of Nrf2 by Limonoids from *Khaya grandifoliola* C.DC Protect L-02 Hepatocytes against Acetaminophen-Induced Hepatotoxicity. (2017) *Front. Pharmacol.* 8:653 WB ;Human. 28974930
- **[IF=2.639]** Yue Wang # et al. Mitophagy Induced by Mitochondrial Function Damage in Chicken Kidney Exposed to Cr(VI). *Biol Trace Elem Res.* 2021 Feb;199(2):703-711. WB ;Chicken. 32440992