

**bs-1533R****[ Primary Antibody ]****COX4I1 Rabbit pAb****Bioss**  
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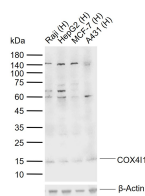
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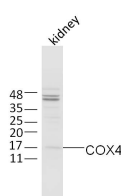
400-901-9800

**— DATASHEET —**

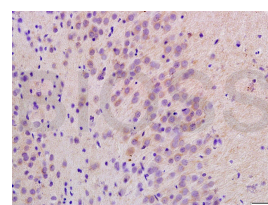
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| <b>Host:</b> Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>Isotype:</b> IgG  | <b>Applications:</b> <b>WB</b> (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<br>(predicted: Rat, Pig, Cow, Dog, Horse)<br><br><b>Predicted MW.:</b> 17 kDa<br><br><b>Observed MW.:</b> 17 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: 101-169/169.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                      |                                                                                                                                                                                                                                                                                                                                    |  |
| <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] |                      |                                                                                                                                                                                                                                                                                                                                    |  |
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**— VALIDATION IMAGES —**

Sample: Lane 1: Human Raji cell lysates Lane 2: Human HepG2 cell lysates Lane 3: Human MCF-7 cell lysates Lane 4: Human A431 cell lysates  
Primary: Anti-COX4I1 (bs-1533R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 17 kDa Observed band size: 17 kDa



Sample: kidney (Mouse) Lysate at 40 ug Primary: Anti-COX4 (Bs-1533R) at 1/300 dilution  
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 17 kD  
Observed band size: 17 kD



Tissue/cell: mouse 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/COX IV-1 Polyclonal Antibody, Unconjugated(bs-1533R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

**— SELECTED CITATIONS —**

- **[IF=7.9]** Fukui Shen. et al. Catalpolaglycone disrupts mitochondrial thermogenesis by specifically binding to a conserved lysine residue of UCP2 on the proton leak tunnel. PHYTOMEDICINE. 2024 Jan;;155356 IF ;Mouse. 10.1016/j.phymed.2024.155356

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

- **[IF=7.7]** Ya Xing. et al. Mitochondrial HKDC1 suppresses oxidative stress and apoptosis by regulating mitochondrial function in goose fatty liver. INT J BIOL MACROMOL. 2024 Dec;282:137222 WB ;Mouse. 39491705
- **[IF=6.551]** Wei J et al. Endosulfan induces cardiotoxicity through apoptosis via unbalance of pro-survival and mitochondrial-mediated apoptotic pathways. Sci Total Environ . 2020 Jul 20;727:138790. WB ;human. 32344260
- **[IF=6.025]** Xuliang Zhang. et al. PINK1/Parkin-mediated mitophagy mitigates T-2 toxin-induced nephrotoxicity. FOOD CHEM TOXICOL. 2022 Jun;164:113078 WB ;Mouse. 35489469
- **[IF=4.848]** Delong Wang. et al. Baoyuan Jiedu Decoction Alleviates Cancer-Induced Myotube Atrophy by Regulating Mitochondrial Dynamics Through p38 MAPK/PGC-1 $\alpha$  Signaling Pathway. Front Oncol. 2020; 10: 523577 WB ;Mouse. 33102208