bs-1533R **[Primary Antibody]**

COX4I1 Rabbit pAb

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DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 1327 **SWISS:** P13073

Target: COX4I1

Immunogen: KLH conjugated synthetic peptide derived from human COX4I1: 101-169/169.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: 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]

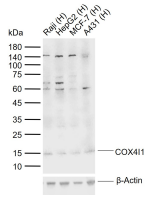
Applications: **WB** (1:500-2000)
IHC-P (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)

Reactivity: Human, Mouse, Rat (predicted: Pig, Cow, Dog, Horse)

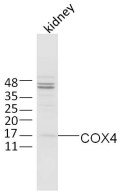
Predicted MW.: 17 kDa

Subcellular Location: Cytoplasm

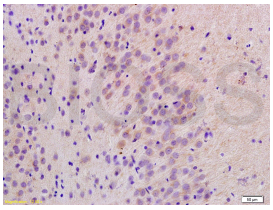
VALIDATION IMAGES



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: 15 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

- **[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-1α Signaling Pathway. Front Oncol. 2020; 10: 523577 WB ;Mouse. 33102208