bs-1550R **[Primary Antibody]**

NCX1 Rabbit pAb

www.bioss.com.cn
sales@bioss.com.cn
techsupport@bioss.com.cn
400-901-9800

DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 6546 **SWISS:** P32418

Target: NCX1

Immunogen: KLH conjugated synthetic peptide derived from human NCX1: 801-900/971.

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: In cardiac myocytes, Ca(2+) concentrations alternate between high levels during contraction and low levels during relaxation. The increase in Ca(2+) concentration during contraction is primarily due to release of Ca(2+) from intracellular stores. However, some Ca(2+) also enters the cell through the sarcolemma(plasma membrane). During relaxation, Ca(2+) is sequestered within the intracellular stores. To prevent overloading of intracellular stores, the Ca(2+) that entered across the sarcolemma must be extruded from the cell. The Na(+)-Ca(2+) exchanger is the primary mechanism by which the Ca(2+) is extruded from the cell during relaxation. In the heart, the exchanger may play a key role in digitalis action. The exchanger is the dominant mechanism in returning the cardiac myocyte to its resting state following excitation.[supplied by OMIM].

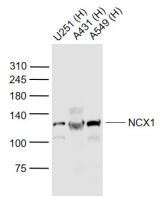
Applications: **WB** (1:500-2000)
IHC-P (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)
Flow-Cyt (0.2ug/test)

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

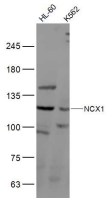
Predicted MW.: 106 kDa

Subcellular Location: Cell membrane ,Cytoplasm

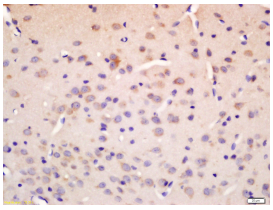
VALIDATION IMAGES



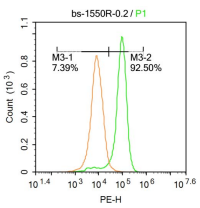
Sample: Lane 1: U251 (Human) Cell Lysate at 30 ug Lane 2: A431 (Human) Cell Lysate at 30 ug Lane 3: A549 (Human) Cell Lysate at 30 ug Primary: Anti-NCX1 (bs-1550R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 120 kD Observed band size: 120 kD



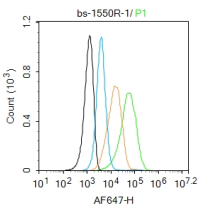
Sample: HL-60(Human) Cell Lysate at 30 ug K562(Human) Cell Lysate at 30 ug Primary: Anti-NCX1 (bs-1550R) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 106 kD Observed band size: 118 kD



Paraformaldehyde-fixed, paraffin embedded (rat brain tissue); 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 (NCX1) Polyclonal Antibody, Unconjugated (bs-1550R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



U-937 cells were fixed with 4% PFA for 10min at room temperature,permeabilized with 20%



Blank control:U937. Primary Antibody (green line): Rabbit Anti-NCX1 antibody (bs-1550R)

PBST for 20 min at room temperature, and incubated in 5% BSA blocking buffer for 30 min at room temperature. Cells were then stained with CXCL2 Antibody(bs-1550R) at 1:500 dilution in blocking buffer and incubated for 30 min at room temperature, washed twice with 2%BSA in PBS, followed by secondary antibody incubation for 40 min at room temperature. Acquisitions of 20,000 events were performed. Cells stained with primary antibody (green), and isotype control (orange).

Dilution: 1µg /10^6 cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody : Goat anti-rabbit IgG-AF647 Dilution: 1µg /test. Protocol The cells were incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

SELECTED CITATIONS

- **[IF=4.3]** Shasha Chen. et al. Quercetin alleviates zearalenone-induced apoptosis and necroptosis of porcine renal epithelial cells by inhibiting CaSR/CaMKII signaling pathway. FOOD CHEM TOXICOL. 2023 Nov;:114184 WB ;Pig. 37951344
- **[IF=3.201]** Zhang J et al. TRPV4 Complexes With the Na/Ca 2 Exchanger and IP 3 Receptor 1 to Regulate Local Intracellular Calcium and Tracheal Tension in Mice. Front. Physiol., 06 December 2019. CoIP,WB ;Mouse. doi:10.3389/fphys.2019.01471
- **[IF=1.922]** Zhu Y et al. MicroRNA-34a mediates atrial fibrillation through regulation of Ankyrin-B expression.Mol Med Rep. 2018 Jun;17(6):8457-8465. WB ;Human. 29658562
- **[IF=2.2]** Bing Lu. et al. Mitochondrial Calcium Homeostasis Mediated by Estradiol Contributes to Atrial Fibrillation Protection. BIOCHEM BIOPH RES CO. 2025 May;:152050 IF ;Rat. 40414005