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Anti-NCX1 Rabbit Monoclonal Antibody

Catalog # ABO15300

Product Information

Application	WB
Primary Accession	P32418
Host	Rabbit
Isotype	IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-NCX1 Rabbit Monoclonal Antibody . Tested in WB application. This antibody reacts with Human, Mouse, Rat.

Additional Information

Gene ID	6546
Other Names	Sodium/calcium exchanger 1, Na(+)/Ca(2+)-exchange protein 1, Solute carrier family 8 member 1, SLC8A1
Calculated MW	108547
Application Details	WB 1:500-1:2000
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: 18S76
Immunogen	A synthesized peptide derived from human NCX1
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Protein Information

Name	SLC8A1
Function	Mediates the exchange of one Ca(2+) ion against three to four Na(+) ions across the cell membrane, and thereby contributes to the regulation of cytoplasmic Ca(2+) levels and Ca(2+)-dependent cellular processes (PubMed:11241183, PubMed:1374913, PubMed:1476165). Contributes to Ca(2+) transport during excitation-contraction coupling in muscle

(PubMed:11241183, PubMed:1374913, PubMed:1476165). In a first phase, voltage-gated channels mediate the rapid increase of cytoplasmic Ca(2+) levels due to release of Ca(2+) stores from the endoplasmic reticulum (PubMed:11241183, PubMed:1374913, PubMed:1476165). SLC8A1 mediates the export of Ca(2+) from the cell during the next phase, so that cytoplasmic Ca(2+) levels rapidly return to baseline (PubMed:11241183, PubMed:1374913, PubMed:1476165). Required for normal embryonic heart development and the onset of heart contractions (By similarity).

Cellular Location

Cell membrane; Multi-pass membrane protein

Tissue Location

Detected primarily in heart and at lower levels in brain (PubMed:1374913). Expressed in cardiac sarcolemma, brain, kidney, liver, pancreas, skeletal muscle, placenta and lung (PubMed:1476165)

Images

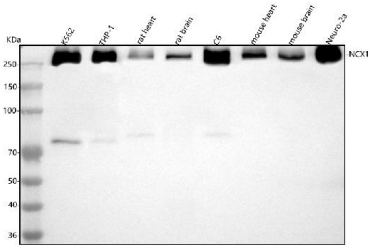


Figure 1. Western blot analysis of NCX1 using anti-NCX1 antibody (M03876).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: human K562 whole cell lysates,
Lane 2: human THP-1 whole cell lysates,
Lane 3: rat heart tissue lysates,
Lane 4: rat brain tissue lysates,
Lane 5: rat C6 whole cell lysates,
Lane 6: mouse heart tissue lysates,
Lane 7: mouse brain tissue lysates,
Lane 8: mouse Neuro-2a whole cell lysates.
After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-NCX1 antigen affinity purified monoclonal antibody (Catalog # M03876) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:1000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for NCX1 at approximately 300 kDa. The expected band size for NCX1 is at 109 kDa.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.