

Immunotag™ NCX1 Polyclonal Antibody

Antibody Specification	
Catalog No.	ITT5103
Product Description	Immunotag™ NCX1 Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	NCX1
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. ELISA: 1/5000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	Synthesized peptide derived from NCX1, at AA range: 270-350
Specificity	NCX1 Polyclonal Antibody detects endogenous levels of NCX1 protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	SLC8A1
Accession No.	P32418 P70414 Q01728
Alternate Names	SLC8A1; CNC; NCX1; Sodium/calcium exchanger 1; Na(+)/Ca(2+)-exchange protein 1

Antibody Specification

Description	<p>solute carrier family 8 member A1(SLC8A1) Homo sapiens 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, Apr 2004],</p>
Cell Pathway/ Category	<p>Calcium,Cardiac muscle contraction,Hypertrophic cardiomyopathy (HCM),Arrhythmogenic right ventricular cardiomyopathy (ARVC),Dilated cardiomyopathy,</p>
Protein Expression	<p>Airway smooth muscle,Brain,Heart,Liver,PCR rescued clones,Placenta,</p>
Subcellular Localization	<p>mitochondrion,microtubule,plasma membrane,integral component of plasma membrane,intercalated disc,membrane,integral component of membrane,Z disc,T-tubule,sarcolemma,dendritic spine,dendritic shaft,</p>
Protein Function	<p>Additional isoforms seem to exist,enzyme regulation:By ATP.,function:Rapidly transports Ca(2+) during excitation-contraction coupling. Ca(2+) is extruded from the cell during relaxation so as to prevent overloading of intracellular stores.,similarity:Belongs to the sodium/potassium/calcium exchanger family. SLC8 subfamily.,similarity:Contains 2 Calx-beta domains.,tissue specificity:Cardiac sarcolemma.,</p>
Usage	<p>For Research Use Only! Not for diagnostic or therapeutic procedures.</p>