

KO583

For research use only

Anti Rat panNCX Monoclonal Antibody

Clone No. 2S1-pan

This antibody was prepared by Dr. Takahiro Iwamoto, Fukuoka University.

Code No. KO583
Target NCX1, NCX2, NCX3
Category Transporter
Gene ID 140447
Primary Source -
Synonyms SLC8A2; NCX2

Type Monoclonal Antibody
Immunogen Fusion protein of Rat NCX2

Raised in Mouse
Myeloma P3U1
Clone number 2S1-pan
Purification ProteinG
Source Serum-free medium
Isotype IgG1, κ
Cross Reactivity Human, Mouse
Label Unlabeled
Concentration 0.25 mg/mL
Contents (Volume) 50 μ g (200 μ L/vial)

Buffer PBS [containing 2% Block Ace as a stabilizer, 0.1% Proclin as a bacteriostat]

Storage Store at - 20 long term, store at 4 short term. Avoid repeated freeze-thaw cycles.

Application WB,IHC

ELISA	WB	IHC	ICC
Not tested	0.1	0.1	Not tested
IP	FCM	IF	Neutralization
Not tested	Not tested	Not tested	Not tested

(μ g/mL)**Reference**

1. Iwamoto T et al. Protein kinase C-dependent regulation of Na⁺/Ca²⁺ exchanger isoforms NCX1 and NCX3 does not require their direct phosphorylation. *Biochemistry* 37(49):17230-17238, 1998. *Application Reference
2. Iwamoto T and Kita S. YM-244769, a novel Na⁺/Ca²⁺ exchange inhibitor that preferentially inhibits NCX3, efficiently protects against hypoxia/reoxygenation-induced SH-SY5Y neuronal cell damage. *Mol Pharmacol* 70(6):2075-2083, 2006. *Application Reference
3. Li JP et al. Three Na⁺/Ca²⁺ exchanger (NCX) variants are expressed in mouse osteoclasts and mediate calcium transport during bone resorption. *Endocrinology* 148(5):2116-2125, 2007. *Application Reference

UniPlot Summary

//Function: Rapidly transports Ca²⁺ during excitation-contraction coupling. Ca²⁺ is extruded from the cell during relaxation so as to prevent overloading of intracellular stores.

//Subcellular location: Membrane; Multi-pass membrane protein.

//Tissue specificity: Brain and skeletal muscle.

//Sequence similarities: Belongs to the sodium/potassium/calcium exchanger family. SLC8 subfamily. Contains 2 Calx-beta domains.