

KO582

For research use only

Anti Rat NCX3 Monoclonal Antibody

Clone No. 3U3

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

Code No. KO582
Target NCX3
Category Transporter
Gene ID 140448
Primary Source -
Synonyms SLC8A3; NCX3

Type Monoclonal Antibody
Immunogen Fusion protein of Rat NCX3

Raised in Mouse
Myeloma P3U1
Clone number 3U3
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: Expression restricted to brain and skeletal muscle.

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

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