

Product datasheet for **TA329044**

Nalcn Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3000
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide (C)SMMFESPFRRVMH, corresponding to amino acid residues 902-914 of rat Sodium leak channel non-selective protein. Extracellular, S1-S2 domain III.
Formulation:	Lyophilized. Concentration before lyophilization ~0.8mg/ml (lot dependent, please refer to CoA along with shipment for actual concentration). Buffer before lyophilization: phosphate buffered saline (PBS), pH 7.4, 1% BSA, 0.05% NaN ₃ .
Reconstitution Method:	Add 50 ul double distilled water (DDW) to the lyophilized powder.
Purification:	Affinity purified on immobilized antigen.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	sodium leak channel, non-selective
Database Link:	NP_705894 Entrez Gene 259232 Human Entrez Gene 338370 Mouse Entrez Gene 266760 Rat Q6Q760



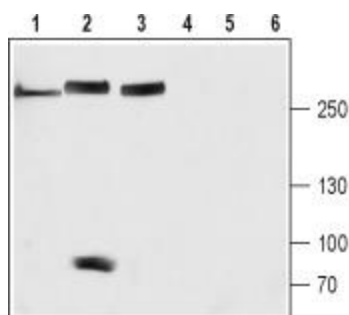
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Background:

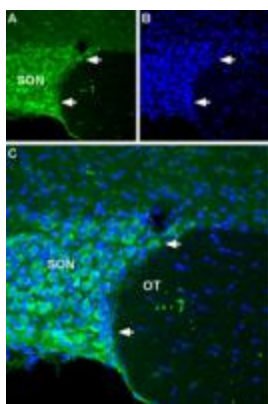
The existence of resting K⁺ conductance has been known for some time. Only recently has the Nalcn (sodium leak channel non-selective protein) has been found responsible for the resting Na⁺ conductance. Nalcn is a member of the NaV and CaV channels family which have four homologous repeats of six transmembrane domains. One structural difference is that Nalcn is less positively charged in the voltage sensing segment. The protein forms voltage-independent non-inactivating channel which is permeable to Na⁺, K⁺ and Ca²⁺ ions. Evidence suggests that Nalcn is a non-redundant and thus essential channel since knock-out mice display disrupted respiratory rhythm and die with 24 hours of birth. In addition, isolated neurons from these mice have decreased excitability. The channel is extensively expressed in the central nervous system, heart, pituitary and adrenal glands and pancreatic islet cells. In pancreatic islets, Nalcn is activated by acetylcholine via its physical association with M3 muscarinic receptor, and potentiates insulin secretion induced by glucose uptake.

Synonyms:

bA430M15.1; Canlon; FLJ23913; FLJ44659; FLJ44764; MGC74524; VGCNL1

Product images:


Western blot analysis of rat brain (lanes 1 and 4), mouse heart (lanes 2 and 5) and SH-SY5S (lanes 3 and 6) lysates: 1-3. Anti-Sodium Leak Channel Non-Selective Protein (Nalcn) (extracellular) antibody, (1:200). 4-6. Anti-Sodium Leak Channel Non-Selective Protein (Nalcn) (extracellular) antibody, preincubated with the control peptide antigen.



Expression of Nalcn in rat hypothalamus. Immunohistochemical staining of rat hypothalamus using Anti-Sodium Leak Channel Non-Selective Protein (Nalcn) (extracellular) antibody. A. Nalcn (green) staining appears in the supra-optic nucleus (SON). B. DAPI is used as the counterstain (blue). White arrows point at the sharp border between the SON and optic tract (OT). C. Merged images of A and B.