

## Product datasheet for **TA328728**

### Cacna1i Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3000
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide CNGRMPNIAKDVFTK, corresponding to amino acid residues 1053-1067 of rat Cav3.3. Intracellular, between domains II and 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 <sub>3</sub> .
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:	calcium voltage-gated channel subunit alpha1 I
Database Link:	<a href="#">NP_064469</a> <a href="#">Entrez Gene 8911 Human</a> <a href="#">Entrez Gene 239556 Mouse</a> <a href="#">Entrez Gene 56827 Rat</a> <a href="#">Q9Z0Y8</a>



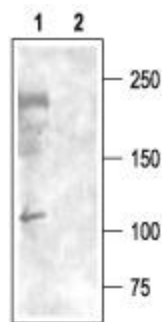
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**Background:**

T-type  $\text{Ca}^{2+}$  channels play an important role in many cellular processes such as hormone secretion, neurotransmitter release and cell differentiation. T-type channels are also known to participate in the pacemaker activities of heart and neurons including thalamic neurons. Three genes encoding T-type  $\text{Ca}^{2+}$  channels have been cloned and designated as  $\text{CaV}3.1$  (a1G),  $\text{CaV}3.2$  (a1H) and  $\text{CaV}3.3$  (a1I). While  $\text{CaV}3.1$  (a1G) and  $\text{CaV}3.2$  (a1H) are widely expressed in various tissues,  $\text{CaV}3.3$  (a1I) is primarily expressed in the central nervous system, where high expression was described in thalamic neurons. The  $\text{Ca}^{2+}$  current generated by the  $\text{CaV}3.3$  channel displays much slower activation and inactivation compared to the currents produced by  $\text{CaV}3.1$  and  $\text{CaV}3.2$ , suggesting it might play a different role in neuronal excitability.

**Synonyms:**

Ca(V)3.3

**Product images:**

Western blot analysis of rat brain membranes: 1. Anti-Cav3.3 antibody, (1:200). 2. Anti-Cav3.3 antibody, preincubated with the control peptide antigen.