

## **Product datasheet for TA328730**

## OriGene Technologies, Inc.

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## **Rabbit Monoclonal Antibody**

**Product data:** 

**Product Type:** Primary Antibodies **Reactivity:** Human, Mouse, Rat

**Host:** Rabbit

Clonality: Monoclonal

**Immunogen:** GST fusion protein with residues 1-46 of rabbit Cav1.2a, with serine 44 replaced with alanine.

Intracellular, N-terminus.

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% NaN3.

**Reconstitution Method:** Add 50 ul double distilled water (DDW) to the lyophilized powder.

**Purification:** The serum was depleted of anti-GST antibodies by affinity chromatography on immobilized

GST, and then anti-Cav1.2a antibody was affinity purified on immobilized CardN1-46(S44A).

Conjugation: Unconjugated

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

Background: All L-type calcium channels are encoded by one of the CaV1 channel genes. These channels

play a major role as a Ca2+ entry pathway in skeletal cardiac and smooth muscles as well as in neurons, endocrine cells and possibly in non-excitable cells such as hematopoetic and epithelial cells. Several peptidyl toxins are described that are specific L-type channels blockers,

but so far no selective blocker for one of the CaV1 isoforms have been described. These include the Mamba toxins Calcicludine, Calciseptine and FS-2. All CaV1 channels are

influenced by dIHCydropyridines (DHP) and are also referred to as DHP receptor. While the CaV1.1 and CaV1.4 isoforms are expressed in restricted tissues (skeletal muscle and retina, respectively), CaV1.3 channels are found in heart, brain and pancreas and CaV1.2 channels are ubiquitously expressed. There are two splice variants to the Cav1.2 channel designated Cav1.2a and Cav1.2b. The expression of the Cav1.2b variant is restricted to smooth muscle

while Cav1.2a specifically expressed in cardiac muscle.

