

Product datasheet for **AP05135PU-N**

CACNA1I Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	Western Blot: 5 - 10 µg/ml.
Reactivity:	Human
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic peptide derived from the rat alpha1I calcium channel conjugated to KLH.
Specificity:	This antibody reacts to CACNA1I.
Formulation:	Phosphate buffered saline with 0.08% sodium azide State: Purified State: Liquid purified Ig
Concentration:	lot specific
Conjugation:	Unconjugated
Storage:	The antibody can be shipped at ambient temperature. Store (in aliquots) at -20°C only. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	calcium voltage-gated channel subunit alpha1 I
Database Link:	Entrez Gene 8911 Human Q9P0X4



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Background:

Voltage-sensitive calcium channels (VSCC) mediate the entry of calcium ions into excitable cells and are also involved in a variety of calcium-dependent processes, including muscle contraction, hormone or neurotransmitter release, gene expression, cell motility, cell division and cell death. T-type channels serve pacemaking functions in both central neurons and cardiac nodal cells and support calcium signaling in secretory cells and vascular smooth muscle. They may also be involved in the modulation of firing patterns of neurons which is important for information processing as well as in cell growth processes. Using co-transfection techniques we investigated the functional effects of each of the gamma subunits on the biophysics of the T-type VSCC encoded by the alpha(1I) subunit. This revealed a substantially slowed rate of deactivation in the presence of gamma(2). In contrast, there was no significant corresponding effect of either gamma(3) or gamma(4) on alpha(1I) subunit-mediated currents.(2)

Synonyms:

KIAA1120, Cav3.3, Ca(v)3.3