abcam

Product datasheet

CACNA1A peptide ab205923

Description

Product name CACNA1A peptide

Accession <u>O00555</u>

Animal free No

Nature Synthetic

Specifications

Our Abpromise guarantee covers the use of ab205923 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications Blocking

Form Liquid

Additional notes This is the blocking peptide for <u>ab181371</u>

- First try to dissolve a small amount of peptide in either water or buffer. The more charged residues on a peptide, the more soluble it is in aqueous solutions.
- If the peptide doesn't dissolve try an organic solvent e.g. DMSO, then dilute using water or
- Consider that any solvent used must be compatible with your assay. If a peptide does not dissolve and you need to recover it, lyophilise to remove the solvent.
- Gentle warming and sonication can effectively aid peptide solubilisation. If the solution is cloudy or has gelled the peptide may be in suspension rather than solubilised.
- Peptides containing cysteine are easily oxidised, so should be prepared in solution just prior to use.

Preparation and Storage

Stability and Storage Shipped at 4°C. Store at -20°C.

General Info

Relevance Cav2.1 is a voltage-sensitive calcium channels (VSCC) which belongs to the calcium channel

alpha-1 subunit family. Cav2.1 mediates the entry of calcium ions into excitable cells and is also involved in a variety of calcium-dependent processes, including muscle contraction, hormone or

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neurotransmitter release, gene expression, cell motility, cell division and cell death. Cav2.1 (isoform alpha-1A) gives rise to P and/or Q-type calcium currents. Voltage-dependent calcium channels are multisubunit complexes, consisting of alpha-1, alpha-2, beta and delta subunits in a 1:1:11 ratio. The channel activity is directed by the pore-forming and voltage-sensitive alpha-1 subunit. In many cases, this subunit is sufficient to generate voltage-sensitive calcium channel activity. The auxiliary subunits beta and alpha-2/delta linked by a disulfide bridge regulate the channel activity.

Cellular localization

Cell Membrane

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