

Anti-Cav β 1 Ca²⁺ Channel Monoclonal Antibody

ORDERING INFORMATION

Catalog No.: 11500 (clone S7-18)

Size: 100ug in PBS, pH 7.4; 50% glycerol, 0.09% sodium azide. Purified by Protein G affinity chromatography.

BACKGROUND

Ion channels are integral membrane proteins that help establish and control the small voltage gradient across the plasma membrane of living cells by allowing the flow of ions down their electrochemical gradient. Calcium channel, voltage-dependent, beta 1 subunit, also known as CACNB1, is a human gene. The protein encoded by this gene belongs to the calcium channel beta subunit family. It plays an important role in the calcium channel by modulating G protein inhibition, increasing peak calcium current, controlling the alpha-1 subunit membrane targeting, and shifting the voltage dependence of activation and inactivation. Alternative splicing occurs at this locus, and three transcript variants encoding three distinct isoforms have been identified.

SPECIFICATION SUMMARY

Antigen: Synthetic peptide corresponding to aa 19-34 of rat Cav21 (gene accession no. NP_059042).

Host Species: Mouse

Antibody Class: IgG2a

SPECIFICITY

This antibody recognizes human, mouse, and rat Cav β 1. It does not cross-react with Cav β 4.

APPLICATIONS

Immunoblotting: use at 1ug/ml. Bands of ~55 and 80kDa are detected.

Immunohistochemistry and

Immunocytochemistry: use at 0.1-1ug/ml

Immunofluorescence: use at 1-10ug/ml

These are recommended concentrations.

User should determine optimal concentrations for their application.

Positive control: Rat brain lysate

DILUTION INSTRUCTIONS

Dilute in PBS or medium which is identical to that used in the assay system.

STORAGE AND STABILITY

This antibody is stable for at least one (1) year at -20°C. Avoid repeated freezing and thawing.

For in vitro investigational use only. Not for use in therapeutic or diagnostic procedures.