For Research Use Only

CoraLite® Plus 488-conjugated SNAP25 Monoclonal antibody

Size: 1000 μg/ml



Catalog Number: CL488-60159

Basic Information

Catalog Number: CL488-60159

BC010647 GeneID (NCBI): 6616

GenBank Accession Number:

Source: UNIPROT ID:
Mouse P60880
Isotype: Full Name:

IgG2b synaptosomal-associated protein,

Immunogen Catalog Number: 25kDa
AG6695 Calculated MW:

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23 kDa
Observed MW:
25 kDa

Purification Method:

Protein A purification

CloneNo.: 3E4B7

Recommended Dilutions:

WB 1:1000-1:4000 IF/ICC 1:50-1:500

Excitation/Emission maxima

wavelengths: 493 nm / 522 nm

Applications

Tested Applications:

IF/ICC, WB

Species Specificity: human, mouse, rat

Positive Controls:

WB: mouse brain tissue, rat brain tissue

IF/ICC: PC-12 cells,

Background Information

The synaptosomal associated protein of 25 kD (SNAP-25) was first identified as a major synaptic protein by Wilson and colleagues. The protein interacts with syntaxin and synaptobrevin through its N-terminal and C-terminal - helical domains. Its palmitoylation domain is located in the middle of the molecule that contains four cysteine residues. Mutation of the cysteines abolishes palmitoylation and membrane binding. Several elegant studies using synaptosome preparations and permeabilized PC12 cells have suggested that SNAP-25 may act in the late post-docking steps of exocytosis. By limited proteolysis and in vitro binding assay, it is proposed that the two helix domains act independently and contribute equally to form the SNARE complex with syntaxin and synaptobrevin. It seems that a major regulatory element is located in the C-terminus of SNAP-25. Removing a 9 amino acid sequence of SNAP-25 inhibited neurosecretion in chromaffin cells. In addition, it has been shown that inhibition of neurosecretion by botulinum toxin E can be rescued by a SNAP-25 C-terminal peptide, probably by initiating the formation of a fusion competent SNARE complex.

Storage

Storage:

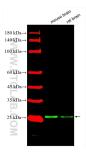
Store at -20 °C. Avoid exposure to light. Stable for one year after shipment.

Storage Buffer

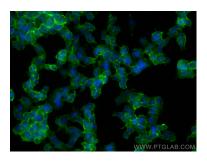
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with CL488-60159 (SNAP25 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (-20°C Ethanol) fixed PC-12 cells using CoraLite® Plus 488 SNAP25 antibody (CL488-60159, Clone: 3E4B7) at dilution of 1:200.