For Research Use Only

CoraLite®594-conjugated SNAP25 Monoclonal antibody



Catalog Number: CL594-60159

Basic Information

Catalog Number: CL594-60159

Size: 2000 μg/ml Source: Mouse Isotype: lgG2b

Immunogen Catalog Number:

AG6695

Tested Applications:

Species Specificity:

GenBank Accession Number:

BC010647 GeneID (NCBI): 6616 **UNIPROT ID:** P60880

synaptosomal-associated protein, 25kDa

Calculated MW:

Full Name:

23 kDa Observed MW: 25 kDa

Purification Method:

Protein A purification

CloneNo.: 3E4B7

IF 1:50-1:500

Recommended Dilutions: WB 1:500-1:1000

Excitation/Emission maxima

wavelengths: 588 nm / 604 nm

Applications

IF/ICC, WB

human, mouse, rat, pig

Positive Controls:

WB: mouse brain tissue,

IF: 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 postdocking 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

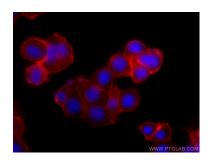
Storage:

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

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

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Immunofluorescent analysis of (-20°C Ethanol) fixed PC-12 cells using CL594-60159 (SNAP25 antibody) at dilution of 1:100.



mouse brain tissue were subjected to SDS PAGE followed by western blot with CL594-60159 (SNAP25 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.