

## Datasheet: MCA1308

<b>Description:</b>	MOUSE ANTI HUMAN SNAP-25
<b>Specificity:</b>	SNAP-25
<b>Other names:</b>	SYNAPTOSOMAL-ASSOCIATED PROTEIN
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	SP12
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.2 mg

## Product Details

### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			■	
Immunohistology - Frozen			■	
Immunohistology - Paraffin	■			1/2000 - 1/5000
ELISA	■			
Immunoprecipitation			■	
Western Blotting	■			1/500 - 1/5000

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

<b>Target Species</b>	Human
<b>Species Cross Reactivity</b>	Reacts with: Hamster, Pig, Rat, Gerbil <b>N.B.</b> Antibody reactivity and working conditions may vary between species.
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide
<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml

<b>Immunogen</b>	Crude human synaptic immunoprecipitate.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P60880</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">6616</a>    SNAP25    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	SNAP
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the NSO myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Human SNAP-25 antibody, clone SP12</b> recognizes the human pre-synaptic protein, SNAP-25, also known as Synaptosomal-associated protein 25, Super protein (SUP) or Synaptosomal-associated 25 kDa protein. SNAP-25 is a 206 amino acid presynaptic protein of ~25 kDa containing two <a href="#">t-SNARE coiled-coil homology</a> domains. Mouse anti human SNAP-25 antibody, clone SP12 will recognize SNAP-25 fusion protein from COS cells, but not the fusion protein from bacterial systems.</p> <p>Mouse anti Human SNAP-25 antibody, clone SP12 has been used to study the distribution of synaptic changes in the hippocampus of patients with medically refractory temporal lobe epilepsy. (<a href="#">Honer <i>et al.</i> 1994</a>).</p>
<b>Immunohistology</b>	This product does not require protein digestion pre-treatment of paraffin sections. This product does not require antigen retrieval using heat treatment prior to staining of paraffin sections.
<b>Histology Positive Control Tissue</b>	Brain
<b>References</b>	<ol style="list-style-type: none"> <li>Honer, W.G. <i>et al.</i> (1994) Hippocampal synaptic pathology in patients with temporal lobe epilepsy. <a href="#">Acta Neuropathol. 87 (2): 202-10.</a></li> <li>Honer, W.G. <i>et al.</i> (1992) Regional synaptic pathology in Alzheimer's disease. <a href="#">Neurobiol Aging. 13 (3): 375-82.</a></li> <li>Honer, W.G. <i>et al.</i> (1993) Human synaptic proteins with a heterogeneous distribution in cerebellum and visual cortex. <a href="#">Brain Res. 609 (1-2): 9-20.</a></li> <li>Honer, W.G. <i>et al.</i> (1992) Characterization of a synaptic antigen of interest in neuropsychiatric illness. <a href="#">Biol Psychiatry. 31 (2): 147-58.</a></li> <li>Honer, W.G. <i>et al.</i> (1989) Monoclonal antibodies to study the brain in schizophrenia. <a href="#">Brain Res. 500 (1-2): 379-83.</a></li> <li>Masliah, E. <i>et al.</i> (1994) Topographical distribution of synaptic-associated proteins in the neuritic plaques of Alzheimer's disease hippocampus. <a href="#">Acta Neuropathol. 87 (2): 135-42.</a></li> <li>Simpson, I.A. <i>et al.</i> (1994) Decreased concentrations of GLUT1 and GLUT3 glucose transporters in the brains of patients with Alzheimer's disease. <a href="#">Ann Neurol. 35 (5): 546-51.</a></li> <li>Wakabayashi, K. <i>et al.</i> (1994) Synapse alterations in the hippocampal-entorhinal formation in Alzheimer's disease with and without Lewy body disease. <a href="#">Brain Res. 667 (1): 24-32.</a></li> <li>Dickson, D.W. <i>et al.</i> (1994) Hippocampal sclerosis: a common pathological feature of dementia in very old (≥80 years of age) humans. <a href="#">Acta Neuropathol. 88 (3): 212-21.</a></li> <li>Dickson, D.W. <i>et al.</i> (1995) Correlations of synaptic and pathological markers with cognition of the elderly. <a href="#">Neurobiol Aging. 16 (3): 285-98; discussion 298-304.</a></li> <li>Bragina, L. <i>et al.</i> (2006) GLT-1 down-regulation induced by clozapine in rat frontal cortex is associated with synaptophysin up-regulation. <a href="#">J Neurochem. 99: 134-41.</a></li> <li>Steel, G.J. <i>et al.</i> (1997) Evidence for interaction of the fusion protein alpha-SNAP with</li> </ol>

membrane lipid. [Biochem J. 325 : 511-8.](#)

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15. Lemons, P.P. *et al.* (1997) Regulated secretion in platelets: identification of elements of the platelet exocytosis machinery. [Blood. 90: 1490-500.](#)

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17. Sawada, K. *et al.* (2002) Altered immunoreactivity of complexin protein in prefrontal cortex in severe mental illness. [Mol Psychiatry. 7: 484-92.](#)

18. Chen, H.Y. *et al.* (2009) Melatonin improves presynaptic protein, SNAP-25, expression and dendritic spine density and enhances functional and electrophysiological recovery following transient focal cerebral ischemia in rats. [J Pineal Res. 47: 260-70.](#)

19. Ishimaru, H. *et al.* (2001) Changes in presynaptic proteins, SNAP-25 and synaptophysin, in the hippocampal CA1 area in ischemic gerbils. [Brain Res. 903: 94-101.](#)

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**Storage**

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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**Shelf Life**

18 months from date of despatch.

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**Health And Safety Information**

Material Safety Datasheet documentation #10040 available at: 10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

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**Regulatory**

For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">Alk. Phos.</a> , <a href="#">HRP</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight@488</a> , <a href="#">DyLight@549</a> , <a href="#">DyLight@649</a> , <a href="#">DyLight@680</a> , <a href="#">DyLight@800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR8...)	<a href="#">DyLight@800</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Human Anti Mouse IgG1 (HCA036...)	<a href="#">HRP</a>

## Recommended Negative Controls

### MOUSE IgG1 NEGATIVE CONTROL (MCA928)

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)

**Worldwide**

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: [antibody\\_sales\\_uk@bio-rad.com](mailto:antibody_sales_uk@bio-rad.com)

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