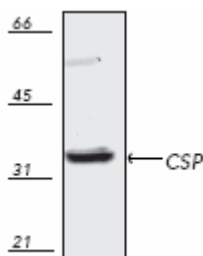


CSP Polyclonal Antibody

Product Specifications	
Catalog Number:	VAP-SV003
Host:	Rabbit
Species Reactivity:	mouse, rat, bovine, <i>Xenopus</i>
Applications: <i>The optimal dilution for a specific application must be determined by the investigator</i>	WB: 1:2000 (Colorimetric) IP: 0.5 µg/mL
Predicted m.w:	~34kDa
Concentration:	See product label
Purification:	Immunoaffinity
Format:	Rabbit immunoglobulin in borate buffered saline, pH 8.2 {25mM sodium borate, 100mM boric acid, 75mM NaCl, 5mM EDTA (disodium salt)}
Storage: <i>Shipping conditions may differ from the recommended storage temperature</i>	Store at -20°C
Immunogen:	Synthetic peptide derived from sequence near the carboxy-terminus of rat CSP, conjugated to KLH; sequence identical to bovine
Related Products:	
LYT-MB100	Mouse Brain Tissue Extract
LYT-RB100	Rat Brain Tissue Extract
SAB-301	Goat anti-Rabbit IgG Polyclonal Antibody, AP Conjugate



Western blot analysis of mouse brain tissue extract, probed with VAP-SV003.

Background:

Cysteine string protein (CSP) is a 34 kDa rat brain protein localized to the cytoplasmic surface of the synaptic vesicle, possibly via palmitoylation^{1,2}. CSP homologs are localized to the nervous system of *Drosophila* and to cholinergic vesicles of *Torpedo*^{3,4}. The N-terminus of CSP contains the J domain, a consensus sequence found on DnaJ-like proteins, members of the heat-shock protein family⁵. As heat shock proteins serve as chaperones that participate in protein folding and protein complex formation, CSP is believed to perform similar functions in the assembly of synaptic vesicle proteins essential to membrane trafficking. Evidence for a role of CSP in presynaptic neurotransmitter release has come from genetic and physiological study in which the *Drosophila* CSP null mutant fails to elicit synaptic potential upon high frequency stimulation⁶. CSP null mutants have a lethal phenotype and for the small percentage of mutant flies that survive, they become paralyzed and die at elevated temperature⁷.

References:

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