

Polyclonal Antibody to Synaptosomal-Associated Protein-23A (SNAP-23A)

Catalog No.:	SP7179P
Quantity:	0.1 mg
Host:	Rabbit
Immunogen:	A 18 residue synthetic peptide DNLSSSEIIQQRHQITDE based on the human SNAP-23A (residues 2-19) (1) was synthesized and the peptide coupled to KLH.
Applications:	Western blot: 2.0 µg/ml. Detects a 28 kDa protein on immunoblots, in samples from human, hamster, canine and bovine origins. This band is inhibited in peptide competition studies on immunoblots. Recommended positive control: HL-60. Other applications not tested. Optimal dilutions of this antibody are dependent on conditions and should be determined by the user. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	SNAP-23 (synaptosome-associated protein) is a 28 kDa homolog of SNAP-25. It shares 59% sequence identity with SNAP-25 and contains a centralized cluster of cysteine residues which, in SNAP-25 is a site for post-translational palmitoylation and membrane association (2). SNAP-23 is able to bind multiple syntaxins and synaptobrevins/VAMP (2). The SNARE (soluble N-ethylmaleimide-sensitive factor [NSF] attachment protein [SNAP] receptor) hypothesis of membrane fusion proposes that SNAPs, synaptobrevins/VAMPs, and syntaxins bind together to form a tripartite structure which regulates membrane fusion and exocytosis. While SNAP-25 is primarily localized to the brain, and therefore thought to function in neurotransmitter vesicle fusion and release, SNAP-23 is more widely expressed and thus may play a role in vesicle traffic in most cell types (3). SNAP-23 relocates from plasma membrane lamellipodia to granule membranes in streptolysin O permeabilized mast cells (4) and SNAP-23 is also involved in apical and basolateral transport of vesicles in MDCK cells (5,6). Two isoforms of SNAP-23 have been cloned. SNAP-23A is identical to SNAP-23B except that SNAP-23B lacks 53 amino acids (90-142) in the region of SNAP-23A that is a target for acylation suggesting that the two isoforms differ in their ability to interact with membranes (5). Reacts with Human, Dog, Pufferfish, Bovine.
Storage:	Store frozen product at or below -20°C. Thawed product may be stored for 2-4 weeks at 4°C. For optimal storage, aliquot to smaller portions and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles. For maximum product recovery, after thawing, centrifuge the product vial before removing cap. Shelf life: one year from despatch.
General Readings:	1. GenBank Accession#: U55936 2. Ravichandran, V., Chawla, A., and Roche, P.A., 1996 J. Biol. Chem. 271 (23):13300-13303. 3. Wong, P.P.C., Daneman, N., Volchuk, A., Lassam, N., Wilson, M.C., Klip, A., and Trimble, W.S. 1997 Biochem. Biophys. Res. Comm. 230:64-68.

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5. Low, S.H., Chapin, S.J., Wimmer, C., Whiteheart, S.W., Komuves, L.G., Mostov, K.E., and Weimbs, T. 1998 J.Cell Biol. 141(7):1503-1513.
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