SYT1 Polyclonal Antibody

E90992

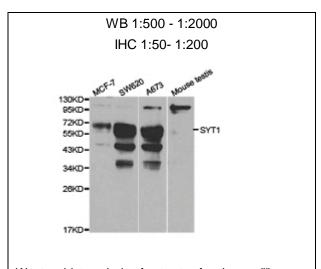|	
Catalog Number:	E90992
Amount:	100ul
Background:	Synaptotagmin 1 (SYT1) is an integral membrane protein found in synaptic vesicles thought to play a role in vesicle trafficking and exocytosis (1). Individual SYT1 proteins are composed of an amino-terminal transmembrane region, a central linker region and a pair of carboxy-terminal C2 domains responsible for binding Ca2+ (2). The C2 domains appear to be functionally distinct, with the C2A domain responsible for regulating synaptic vesicle fusion in a calcium-dependent manner during exocytosis while the C2B domain allows for interaction between adjacent SYT1 proteins (3). Because synaptotagmin 1 binds calcium and is found in synaptic vesicles, this integral membrane protein is thought act as a calcium sensor in fast synaptic vesicle exocytosis. Evidence suggests possible roles in vesicle-mediated endocytosis and glucose-induced insulin secretion as well (4,5). SYT1 binds several different SNARE proteins during calcium-mediated vesicle endocytosis and an association between SYT1 and the SNARE protein SNAP-25 is thought to be a key element in vesicle-mediated exocytosis (6).
Species:	Rabbit
Isotype:	IgG
Storage/Stability:	Store at -20oC or -80oC. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Synonyms:	SYT1;DKFZp781D2042;P65;SVP65;SYT ;
Immunogen:	Recombinant protein of human SYT1
Purification:	Affinity purification
Reactivity:	H M R
Applications:	WB IHC
Molecular Weight:	48kDa
Swiss-Prot No. :	P21579
Gene ID:	6857
References:	1. Fukuda, M. and Mikoshiba, K. (2001) Biochem Biophys Res Commun 281, 1226-33. 2. Südhof, T.C. (2002) J Biol Chem 277, 7629-32. 3. Fernández-Chacón, R. et al. (2001) Nature 410, 41-9. 4. Lynch, K.L. et al. (2007) Mol Biol Cell 18, 4957-68. 5. Gauthier, B.R. and Wollheim, C.B. (2008) Am J Physiol Endocrinol Metab 295, E1279-86. 6. Bai, J. et al. (2004) Neuron 41, 929-42.

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WB 1:500 - 1:2000
IHC 1:50- 1:200

Western blot analysis of extracts of various celllines,
using BID antibody.

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