

SYT1 Conjugated Antibody

Catalog No: #C32113



Package Size: #C32113-AF350 100ul #C32113-AF405 100ul #C32113-AF488 100ul
 #C32113-AF555 100ul #C32113-AF594 100ul #C32113-AF647 100ul
 #C32113-AF680 100ul #C32113-AF750 100ul #C32113-Biotin 100ul

Orders: order@signalwayantibody.com
 Support: tech@signalwayantibody.com

Description

Product Name	SYT1 Conjugated Antibody
Host Species	Rabbit
Clonality	Polyclonal
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous level of total SYT1 protein.
Immunogen Description	Recombinant protein of human SYT1.
Conjugates	Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750
Other Names	SYT1;DKFZp781D2042;P65;SVP65;SYT
Accession No.	Swiss-Prot#:P21579NCBI Gene ID:6857
Uniprot	P21579
GeneID	6857;
Excitation Emission	AF350: 346nm/442nm AF405: 401nm/421nm AF488: 493nm/519nm AF555: 555nm/565nm AF594: 591nm/614nm AF647: 651nm/667nm AF680: 679nm/702nm AF750: 749nm/775nm
Calculated MW	48
Formulation	0.01M Sodium Phosphate, 0.25M NaCl, pH 7.6, 5mg/ml Bovine Serum Albumin, 0.02% Sodium Azide
Storage	Store at 4°C in dark for 6 months

Application Details

Suggested Dilution:

AF350 conjugated: most applications: 1: 50 - 1: 250

AF405 conjugated: most applications: 1: 50 - 1: 250

AF488 conjugated: most applications: 1: 50 - 1: 250

AF555 conjugated: most applications: 1: 50 - 1: 250

AF594 conjugated: most applications: 1: 50 - 1: 250

AF647 conjugated: most applications: 1: 50 - 1: 250

AF680 conjugated: most applications: 1: 50 - 1: 250

AF750 conjugated: most applications: 1: 50 - 1: 250

Biotin conjugated: working with enzyme-conjugated streptavidin, most applications: 1: 50 - 1: 1,000

Product Description

Antibodies were purified by affinity purification using immunogen.

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 Ca^{2+} (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 to 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).

Note: This product is for in vitro research use only