

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Synaptophysin in direct ELISAs.
Source	Monoclonal Mouse IgG _{2B} Clone # 959904
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Synaptophysin Glu50-Phe106 Accession # P08247
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.	

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Synaptophysin (also p38 and BM89 in mouse) is a 38-40 kDa member of the synaptophysin/synaptobrevin family of proteins. It is expressed in neurons, and interacts with VAMP2 at an early stage of vesicle formation, guiding VAMP2 placement into secretory vesicles that are destined for release upon stimulation. Human Synaptophysin is a four transmembrane protein that is 313 amino acids (aa) in length. It contains two luminal domains (aa 50-106 and 162-199) and a cytoplasmic C-terminal targeting region that specifies its localization (aa 214-313). Synaptophysin forms homodimers and oligomers, and heterodimerizes with VAMP2. There is one isoform variant that shows a six aa substitution for aa 35-313. Over aa 50-106, human Synaptophysin shares 89% aa identity with mouse Synaptophysin.

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