10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Synaptophysin Antibody

Catalog # AP51545

Product Information

Application	WB, IHC, IF/IC
Primary Accession	P08247
Reactivity	Human, Mouse, Rat, Pig, Bovine, Mk
Host	Rabbit
Clonality	Polyclonal
Calculated MW	33845

Additional Information

Gene ID	6855
Other Names	Synaptophysin; Major synaptic vesicle protein p38
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Synaptophysin. The exact sequence is proprietary.
Dilution	WB~~ 1:1000 IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

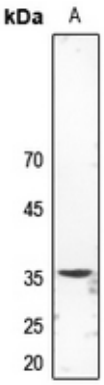
Protein Information

Name	SYP
Function	Possibly involved in structural functions as organizing other membrane components or in targeting the vesicles to the plasma membrane. Involved in the regulation of short-term and long-term synaptic plasticity (By similarity).
Cellular Location	Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane; Multi-pass membrane protein. Synapse, synaptosome
Tissue Location	Expressed in the brain, with expression in the hippocampus, the neuropil in the dentate gyrus, where expression is higher in the outer half of the molecular layer than in the inner half, and in the neuropil of CA4 and CA3 (PubMed:8838578). Expressed in the putamen (at protein level) (PubMed:17296554)

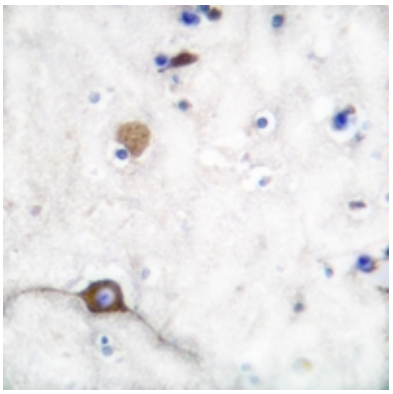
References

Suedhof T.C.,et al.Nucleic Acids Res. 15:9607-9607(1987).
Oezcelik T.,et al.Am. J. Hum. Genet. 47:551-561(1990).
Fisher S.E.,et al.Genomics 45:340-347(1997).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.

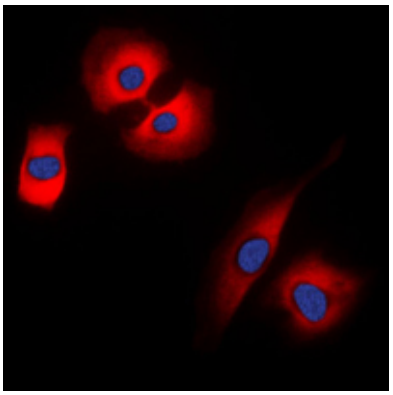
Images



Western blot analysis of Synaptophysin expression in rat muscle (A) whole cell lysates. (Predicted band size: 33 kD; Observed band size: 38 kD)



Immunohistochemical analysis of Synaptophysin staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of Synaptophysin staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.