

Synaptophysin Monoclonal Antibody (SY38)

Product Details

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| Size | 100 µg |
| Species Reactivity | Bovine, Human, Mouse, Rat |
| Published Species | Rat, Mouse, Human |
| Host/Isotype | Mouse / IgG1 |
| Class | Monoclonal |
| Type | Antibody |
| Clone | SY38 |
| Conjugate | Unconjugated |
| Immunogen | Synaptophysin from presynaptic vesicles from bovine brain |
| Form | Liquid |
| Concentration | 1 mg/mL |
| Purification | Protein A |
| Storage buffer | PBS |
| Contains | 0.05% sodium azide |
| Storage conditions | -20° C, Avoid Freeze/Thaw Cycles |
| RRID | AB_2723681 |

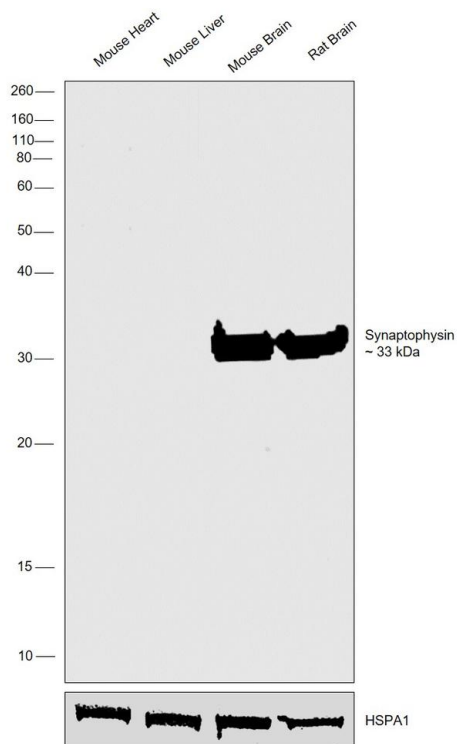
| Applications | Tested Dilution | Publications |
|--|-----------------|----------------|
| Western Blot (WB) | 1:1,000-1:1,500 | 1 Publication |
| Immunohistochemistry (IHC) | - | 2 Publications |
| Immunohistochemistry (Paraffin) (IHC (P)) | 1:100-1:500 | - |
| Immunohistochemistry (PFA fixed) (IHC (PFA)) | Assay-dependent | 1 Publication |
| Immunohistochemistry (Frozen) (IHC (F)) | 1:100-1:500 | - |
| Immunocytochemistry (ICC/IF) | - | 2 Publications |
| Flow Cytometry (Flow) | 1:200-1:500 | - |

Product Specific Information

MA1-213 has been successfully used in western blot, immunofluorescence, immunohistochemistry, flow cytometry, immunoprecipitation and ELISA.

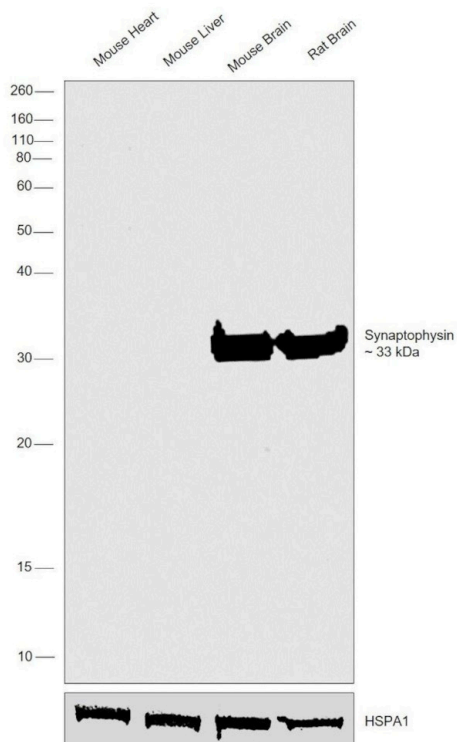
MA1-213 detects Synaptophysin in human, bovine, mouse and rat samples.

Product Images For Synaptophysin Monoclonal Antibody (SY38)



Synaptophysin Antibody (MA1-213) in WB

Western blot was performed using Anti-Synaptophysin Monoclonal Antibody (SY38) (Product # MA1-213) and a 33 kDa band corresponding to Synaptophysin was observed across Mouse Brain and Rat Brain. Tissue extracts (30 µg lysate) of Mouse Heart (Lane 1), Mouse Liver (Lane 2), Mouse Brain (Lane 3) and Rat Brain (Lane 4) were electrophoresed using NuPAGE™ 12% Bis-Tris Protein Gel (Product # NP0342BOX). Resolved proteins were then transferred onto a Nitrocellulose membrane (Product # IB23002) by iBlot® 2 Dry Blotting System (Product # IB21001). The blot was probed with the primary antibody (1:1500 dilution) and detected by chemiluminescence with Goat anti-Mouse IgG (H+L) Superclonal™ Recombinant Secondary Antibody, HRP (Product # A28177, 1:4000 dilution) using the iBright FL 1000 (Product # A32752). Chemiluminescent detection was performed using Novex® ECL Chemiluminescent Substrate Reagent Kit (Product # WP20005).

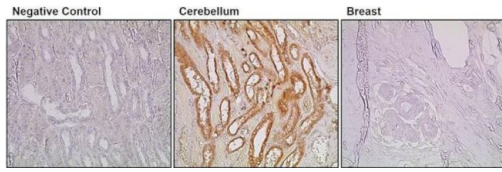


Synaptophysin Antibody (MA1-213)

Antibody specificity was demonstrated by detection of differential basal expression of the target across tissues tested owing to their inherent genetic constitution. Relative expression of Synaptophysin was observed in Mouse Brain in comparison to Mouse Heart and Mouse Liver using Anti-Synaptophysin Monoclonal Antibody (SY38) (Product # MA1-213) in Western Blot. {RE}

Synaptophysin Antibody (MA1-213) in IHC (PFA)

Immunohistochemistry was performed on human cerebellum and human breast tissue. Tissue was deparaffinized with xylene, followed by rehydration in sequential washes of 100% ethanol, 95% ethanol, 80% ethanol, and water. To expose target proteins, antigen retrieval was performed using 10mM sodium citrate (pH 6.0) and heated for 20 min. Following antigen retrieval, tissues were blocked in a 10% goat serum (Product # 31872) in wash buffer solution for 30 minutes at room temperature and endogenous peroxidase activity quenched with Peroxidase Suppressor (Product # 35000). Tissue was then probed with a Synaptophysin mouse monoclonal antibody (Product # MA1-213) at a dilution of 1:200 in 10% goat serum in wash buffer for 1 hour at room temperature in a humidified chamber. Negative control tissue received no primary antibody. Tissues were washed extensively with PBST, and detection was performed using a SuperBoost™ goat anti-mouse Poly HRP secondary antibody reagent (Product # B40961) followed by colorimetric detection using DAB Quanto (Product # TA-125-QHDX). Tissues were then counterstained with hematoxylin and prepped for mounting and imaging.



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Western Blot (1)

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| Scientific reports | Year 2021 |
| Increased VLCFA-lipids and ELOVL4 underlie neurodegeneration in frontotemporal dementia. | Species Human |
| "MA1-213 was used in Western Blot to investigate the role of very long chain fatty acids (VLCFA-lipids) in frontotemporal dementia." | |
| Authors: He Y,Phan K,Bhatia S,Pickford R,Fu Y,Yang Y,Hodges JR,Piguet O,Halliday GM,Kim WS | |

Immunohistochemistry (2)

| | |
|---|--------------------|
| Nature communications | Year 2022 |
| Multimodal monitoring of human cortical organoids implanted in mice reveal functional connection with visual cortex. | Species Mouse |
| "Published figure using Synaptophysin monoclonal antibody (Product # MA1-213) in Immunohistochemistry" | |
| Authors: Wilson MN,Thunemann M,Liu X,Lu Y,Puppo F,Adams JW,Kim JH,Ramezani M,Pizzo DP,Djurovic S,Andreassen OA,Mansour AA,Gage FH,Muotri AR,Devor A,Kuzum D | |
| | Dilution 1:3000 |

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|---|--------------|
| Frontiers in cell and developmental biology | Year 2020 |
| Patient-Specific Retinal Organoids Recapitulate Disease Features of Late-Onset Retinitis Pigmentosa. | |
| "Published figure using Synaptophysin monoclonal antibody (Product # MA1-213) in Immunocytochemistry" | |
| Authors: Gao ML,Lei XL,Han F,He KW,Jin SQ,Zhang YY,Jin ZB | |

Immunohistochemistry (PFA fixed) (1)

| | |
|--|-------------------|
| Scientific reports | Year 2022 |
| Endothelial cells are an important source of BDNF in rat skeletal muscle. | Species Rat |
| "Published figure using Synaptophysin monoclonal antibody (Product # MA1-213) in Immunohistochemistry (PFA fixed)" | |
| Authors: Cefis M,Chaney R,Quiríe A,Santini C,Marie C,Garnier P,Prigent-Tessier A | |
| | Dilution 1:200 |

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ICC/IF (2)

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