

# Synaptophysin Monoclonal Antibody (SP11)

Product Details	
Size	500 µL
Species Reactivity	Human, Mouse, Rat
Published Species	Rat, Mouse, Human
Host/Isotype	Rabbit / IgG
Class	Monoclonal
Type	Antibody
Clone	SP11
Conjugate	Unconjugated
Immunogen	A synthetic peptide of human synaptophysin
Form	Liquid
Concentration	Conc. Not Determined
Storage buffer	tissue culture supernatant/TBS, pH 7.5, with 1% BSA
Contains	0.1% sodium azide
Storage conditions	Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.
RRID	AB_10983675

Applications	Tested Dilution	Publications
Western Blot (WB)	1:200	6 Publications
Immunohistochemistry (IHC)	-	34 Publications
Immunohistochemistry (Paraffin) (IHC (P))	1:200	2 Publications
Immunocytochemistry (ICC/IF)	1:250	6 Publications
Miscellaneous PubMed (Misc)	-	4 Publications

## Product Specific Information

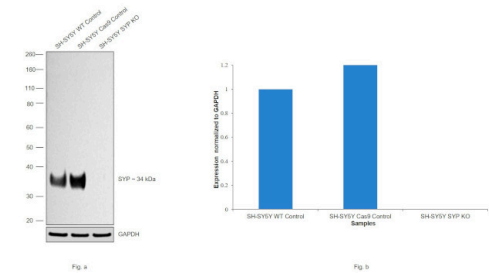
MA5-14532 targets Synaptophysin in IHC (P) and WB applications and shows reactivity with Human samples.

The MA5-14532 immunogen is a synthetic peptide of human synaptophysin.

Product Images For Synaptophysin Monoclonal Antibody (SP11)

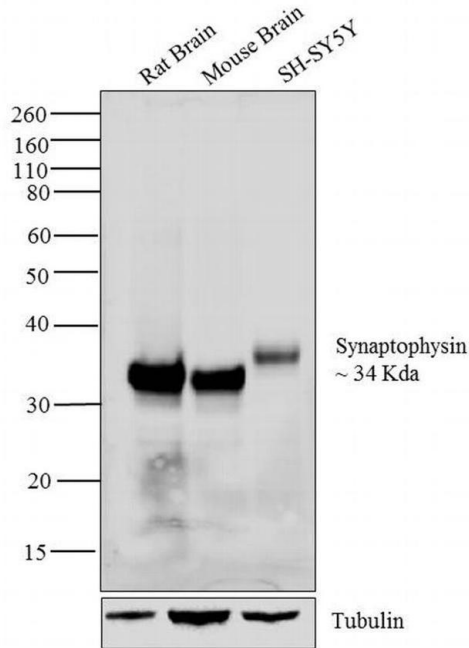
Synaptophysin Antibody (MA5-14532)

Antibody specificity was demonstrated by CRISPR-Cas9 mediated knockout of target protein. A loss of signal was observed for target protein in SYP KO cell line compared to control cell line using Anti-Synaptophysin Monoclonal Antibody (SP11)(Product # MA5-14532). {KO}



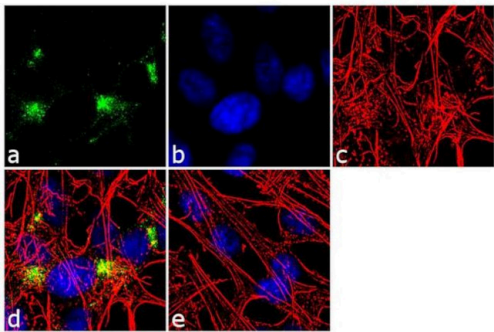
Synaptophysin Antibody (MA5-14532) in WB

Western blot analysis was performed on tissue, whole cell extracts (30 µg lysate) of Rat Brain (Lane 1), Mouse Brain (lane 2), and SH-SY5Y (lane 3). The blots were probed with Anti-Synaptophysin Rabbit Monoclonal Antibody (Product # MA5-14532, 1:1000) and detected by chemiluminescence Goat Anti-Rabbit IgG Secondary Antibody, HRP conjugate (Product # G-21234, 1:5000 dilution). A 34 kDa band corresponding to Synaptophysin was observed across cell lines tested. Known quantity of protein samples were electrophoresed using Novex® NuPAGE® 10 % Bis-Tris gel (Product # NP0301BOX), XCell SureLock™ Electrophoresis System (Product # EI0002) and Novex® Sharp Pre-Stained Protein Standard (Product # LC5800). Resolved proteins were then transferred onto a nitrocellulose membrane with iBlot® 2 Dry Blotting System (Product # IB21001). The membrane was probed with the relevant primary and secondary Antibody following blocking with 5 % skimmed milk. Chemiluminescent detection was performed using Pierce™ ECL Western Blotting Substrate (Product # 32106).



Synaptophysin Antibody (MA5-14532) in ICC/IF

Immunofluorescence analysis of Synaptophysin was done on 70% confluent log phase SH-SY5Y cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 10 minutes, and blocked with 1% BSA for 1 hour at room temperature. The cells were labeled with Synaptophysin (SP11) Rabbit Monoclonal Antibody (Product # MA5-14532) at 1:250 dilution in 0.1% BSA and incubated for 3 hours at room temperature and then labeled with Goat anti-Rabbit IgG (Heavy Chain) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate (Product # A27034) at a dilution of 1:2000 for 45 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI (Product # S36938). F-actin (Panel c: red) was stained with Rhodamine Phalloidin (Product # R415, 1:300). Panel d is a merged image showing cytoplasmic localization. Panel e is a no primary antibody control. The images were captured at 60X magnification.



View more figures on [thermofisher.cn](https://thermofisher.cn)

Western Blot (6)

<p>Journal of extracellular vesicles</p> <p><b>Dynamic release of neuronal extracellular vesicles containing miR-21a-5p is induced by hypoxia.</b></p> <p>"Published figure using Synaptophysin monoclonal antibody (Product # MA5-14532) in Western Blot"</p> <p>Authors: Korvenlaita N,Gómez-Budia M,Scoyni F,Pistono C,Giudice L,Eamen S,Loppi S,de Sande AH,Huremagic B,Bouvy-Liivrand M,Heinäniemi M,Kaikkonen MU,Cheng L,Hill AF,Kanninen KM,Jenster GW,van Royen ME,Ramiro L, Montaner J,Batkova T,Mikulik R,Giugno R,Jolkkonen J,Korhonen P,Malm T</p>	<p>Year 2023</p> <p>Species Mouse</p> <p>Dilution 1:1000</p>
<p>BioFactors (Oxford, England)</p> <p><b>Fructose diet ameliorate effects of macrophage migration inhibitory factor deficiency on prefrontal cortex inflammation, neural plasticity, and behavior in male mice.</b></p> <p>"MA5-14532 was used in Western Blotting to suggest that the ameliorating effects of fructose on neuroinflammation and behavior depend on the presence of macrophage migration inhibitory factor (MIF)."</p> <p>Authors: Vratari M,Šenk V,Bursa B,Gligorovska L,Ignjatovi D,Kovaevi S,Velikovi N,Djordjevic A</p>	

[View more WB references on thermofisher.cn](#)

Immunohistochemistry (34)

<p>Case reports in pathology</p> <p><b>A Previously Undescribed Presentation of Mixed Adenoneuroendocrine Carcinoma.</b></p> <p>"MA514532 was used in immunohistochemistry to discuss a case of mixed adenoneuroendocrine carcinoma of stomach with tubular adenoma and well-differentiated neuroendocrine tumor in the primary tumor in the stomach"</p> <p>Authors: De Luca-Johnson J,Zenali M</p>	<p>Year 2022</p> <p>Species Human</p>
<p>Cells</p> <p><b>Microglia-like Cells Promote Neuronal Functions in Cerebral Organoids.</b></p> <p>"MA5-14532 was used in Immunohistochemistry to conclude that microglia-like cells within the organoids promote neuronal and network maturation and recapitulate some aspects of microglia-neuron co-development in vivo, indicating that cerebral organoids could be a useful biorealistic human in vitro platform for studying microglia-neuron interactions."</p> <p>Authors: Fagerlund I,Dougalis A,Shakirzyanova A,Gómez-Budia M,Pelkonen A,Konttinen H,Ohtonen S,Fazaludeen MF, Koskuvu M,Kuusisto J,Hernández D,Pebay A,Koistinaho J,Rauramaa T,Lehtonen Š,Korhonen P,Malm T</p>	<p>Year 2021</p> <p>Species Human</p> <p>Dilution 1:250</p>

[View more IHC references on thermofisher.cn](#)

More applications with references on thermofisher.cn

- IHC (P) (2)
- ICC/IF (6)
- Misc (4)

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.