



# Synaptophysin Monoclonal Antibody (EP10), eFluor™ 660, eBioscience™

<b>Product Details</b>	
Size	100 μg
Species Reactivity	Hamster, Human
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), eFluor™ 660, eBioscience™
Class	Monoclonal
Туре	Antibody
Clone	EP10
Conjugate	eFluor™ 660
Excitation/Emission Max	651/668 nm
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2574271

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	1 Publication
Immunohistochemistry (Paraffin) (IHC (P))	10 μg/mL	-
Immunocytochemistry (ICC/IF)	Assay-Dependent	1 Publication

#### **Product Specific Information**

Description: This EP10 monoclonal antibody reacts with human Synaptophysin, which is also known as Major Synaptic Vesicle Protein p38. This 38-kDa integral membrane protein is expressed on neuronal presynaptic vesicles in the brain, spinal cord, retina, neuromuscular junctions, and adrenal medulla. Synaptophysin is also expressed in neuroendocrine tumors and neuroblastomas. Synaptophysin has been reported to play a role in synaptic vesicle trafficking.

The EP10 antibody recognizes human and hamster synaptophysin but does not recognize mouse and rat synaptophysin.

Applications Reported: This EP10 antibody has been reported for use in immunohistochemical staining, and immunocytochemistry.

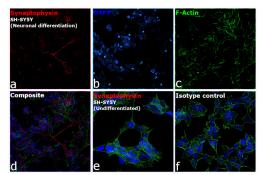
Applications Tested: This EP10 antibody has been tested by immunohistochemistry on FFPE human tissue using low pH antigen retrieval at less than or equal to  $10 \mu g/mL$ . It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

eFluor® 660 is a replacement for Alexa Fluor® 647. eFluor® 660 emits at 659 nm and is excited with the red laser (633 nm). Please make sure that your instrument is capable of detecting this fluorochome.

Excitation: 633-647 nm; Emission: 668 nm; Laser: Red Laser.

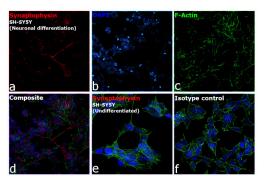
Filtration: 0.2 µm post-manufacturing filtered.

## Product Images For Synaptophysin Monoclonal Antibody (EP10), eFluor™ 660, eBioscience™



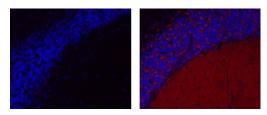
#### Synaptophysin Antibody (50-6525-82)

Antibody specificity was demonstrated by detection of differential basal expression of the target across cell models owing to their inherent genetic constitution. Immunofluorescence analysis using Anti-Synaptophysin Monoclonal Antibody (EP10), eFluor 660, eBioscience™ (Product # 50-6525-82), shows expression of Synaptophysin in SH-SY5Y cells that have been differentiated to neurons. {RE}



#### Synaptophysin Antibody (50-6525-82) in ICC/IF

Immunofluorescence analysis of Synaptophysin was performed using SH-SY5Y cells differentiated into neurons. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 15 minutes, and blocked with 2% BSA for 1 hour at room temperature. The cells were labeled with Synaptophysin Monoclonal Antibody (EP10), eFluor 660, eBioscience™ (Product # 50-6525-82) at 5 µg/mL in 0.1% BSA, incubated at 4 degree celsius overnight (Panel a: Red). Nuclei (Panel b: Blue) were stained with ProLong™ Diamond Antifade Mountant with DAPI (Product # P36962). F-actin (Panel c: Green) was stained with Rhodamine Phalloidin (Product # R415, 1:300 dilution). Panel d represents the merged image showing cytoplasmic localization. Panel e represents undifferentiated SH-SY5Y cells, showing lower levels of Synaptophysin expression. Panel f represents control cells with isotype control antibody to assess background. The images were captured at 60X magnification.



# Synaptophysin Antibody (50-6525-82) in IHC (P)

Immunohistochemistry of formalin-fixed paraffin embedded human cerebellum using 10 μg/mL Mouse IgG1 K Isotype Control eFluor® 660 (left) or 10 μg/mL Anti-Human Synaptophysin eFluor® 660 (right). Nuclei are stained with DAPI.

View more figures on thermofisher.com

#### □ 2 References

### Immunohistochemistry (1)

**Nature communications** 

# Multimodal monitoring of human cortical organoids implanted in mice reveal functional connection with visual cortex.

"Published figure using Synaptophysin monoclonal antibody (Product # 50-6525-82) 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

Year 2022

# Immunocytochemistry (1)

Nature neuroscience

# Cerebral organoids at the air-liquid interface generate diverse nerve tracts with functional output.

"Published figure using Synaptophysin monoclonal antibody (Product # 50-6525-82) in Immunocytochemistry"

Authors: Giandomenico SL,Mierau SB,Gibbons GM,Wenger LMD,Masullo L,Sit T,Sutcliffe M,Boulanger J,Tripodi M, Derivery E,Paulsen O,Lakatos A,Lancaster MA

**Year** 2019

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