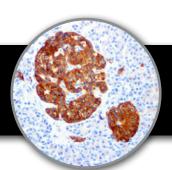
# Synaptophysin, RMab Clone: EP158 C € IVD Rabbit Monoclonal





Inset: IHC of Synaptophysin on a FFPE Pancreas Tissue

## **Intended Use**

For In Vitro Diagnostic Use.

This antibody is intended for use in Immunohistochemical applications on formalin-fixed paraffin-embedded tissues (FFPE), frozen tissue sections and cell preparations. Interpretation of results should be performed by a qualified medical professional.

\* The Synaptophysin antibody, clone EP158, has been manufactured using Epitomics RabMab® technology covered under Patent No.'s 5,675,063 & 7,402,409.

#### **Immunogen**

A synthetic peptide corresponding to residues on the C-terminus (cytoplasmic domain) of human Synaptophysin protein.

# **Summary and Explanation**

Synaptophysin is a synaptic vesicle glycoprotein weighing 38 kDa. It is present in endocrine cells, the brain, spinal cord, and adrenal glands. It acts as a marker for neuroendocrine cells.

Synaptophysin reacts with neuroendocrine cells of human adrenal medulla, carotid body, skin, pituitary, thyroid, lung, pancreas and gastrointestinal mucosa. Positive staining is seen in neurons of the brain, spinal cord, retina, and Paneth's cells in the gastrointestinal tract and gastric parietal cells. This antibody identifies normal neuroendocrine cells and neuroendocrine neoplasms. Diffuse, finely-granular cytoplasmic staining is observed and probably correlates with the distribution of the antigen within neurosecretory vesicles. The expression of Synaptophysin is independent of the presence of NSE or other neuroendocrine markers. Synaptophysin is an independent broad-range marker of neural and neuroendocrine differentiation.

Antibody Type	Rabbit Monoclonal	Clone	EP158
Isotype	lgG	Reactivity	Paraffin, Frozen
Localization	Cytoplasmic	Control	Pancreas, Brain, Pitu- itary, Adrenal, Colon
Species Reactiv	ity	Human, Predicted: Mouse, Rat, Donk	

#### Presentation

Synaptophysin is a rabbit monoclonal antibody derived from cell culture supernatant that is concentrated, dialyzed, filter sterilized and diluted in buffer pH 7.5, containing BSA and sodium azide as a preservative.

### **Presentations**

Catalog Num.	Antibody Type	Dilution	Volume/Qty	
BSB 2237	Tinto Prediluted	Ready-to-Use	3.0 mL	
BSB 2238	Tinto Prediluted	Ready-to-Use	7.0 mL	
BSB 2239	Tinto Prediluted	Ready-to-Use	15.0 mL	
BSB 2240	Concentrated	1:100 - 1:500	0.1 mL	
BSB 2241	Concentrated	1:100 - 1:500	0.5 mL	
BSB 2242	Concentrated	1:100 - 1:500	1.0 mL	
BSB 2243	Control Slides	Not Applicable	5 slides	

## **Precautions**

- **1.** For professional users only. Ensure results are interpreted by a medical professional.
- **2.** This product contains sodium azide (NaN3), a toxic chemical which may react with plumbing to form highly explosive build-ups of metal azides. Upon disposal, flush with large volumes of water to prevent sodium azide build-up.
- **3.** Ensure proper handling procedures are used with reagent. Always wear proper laboratory equipment such as laboratory coat and gloves when handling reagents.
- **4.** Unused solution should be disposed of according to local and federal regulations.
- **5.** Do not ingest reagent. If reagent ingested, contact a poison control center immediately.
- **6.** For complete recommendations for handling biological specimens please refer to the CDC document, "Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories" (4).

## Storage

**Store at 2-8 °C.** Do not use after expiration date listed on package label. Temperature fluctuations should be avoided. Store appropriately when not in use, and avoid prolonged exposure to room temperature conditions.

## **Specimen Preparation**

**Paraffin sections:** The antibody can be used on formalin-fixed paraffin-embedded (FFPE) tissue sections. Ensure tissue undergoes appropriate fixation to ensure best results. Pre-treatment of tissues with heat-induced epitope retrieval (HIER) is recommended using Bio SB ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023), ImmunoDNA Retriever with EDTA (BSB 0030-BSB 0033) or ImmunoDNA Digestor (BSB 0108-0112). See reverse side for complete protocol. Tissue should remain hydrated via use of Bio SB Immuno/DNA Washer solutions (BSB 0029 & BSB 0042).

**Frozen sections and cell preparations:** The antibody can be used for labeling acetone-fixed frozen sections and acetone-fixed cell preparations.

## **Staining Procedure**

- 1. Cut and mount 3-5 micron formalin-fixed paraffin-embedded tissues on positive charged slides such as Bio SB Hydrophilic Plus Slides (BSB 7028).
- 2. Air dry for 2 hours at 58° C.
- 3. Deparaffinize, dehydrate and rehydrate tissues.
- 4. Subject tissues to heat epitope retrieval using a suitable retrieval solution such as ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023) or EDTA (BSB 0030-BSB 0033).
- 5. Any of three heating methods may be used:

#### a. TintoRetriever Pressure Cooker or Equivalent

Place tissues/slides in a staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA, and place in the pressure cooker. Add 1-2 inches of distilled water to the pressure cooker and turn heat to high. Incubate for 15 minutes. Open and immediately transfer slides to room temperature.

## b. TintoRetriever PT Module or Water Bath Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA at 95°-99° C. Incubate for 30-60 minutes.

#### c. Conventional Steamer Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA in a Steamer, cover and steam for 30-60 minutes.

- 6. After heat treatment, transfer slides in ImmunoDNA Retriever with Citrate or EDTA to room temperature and let stand for 15-20 minutes.
- 7. For manual staining, perform antibody incubation at ambient temperature. For automated staining methods, perform antibody incubation according to instrument manufacturer's instructions.
- 8. Wash slides with IHC wash buffer or DI water.
- 9. Continue IHC staining protocol.

#### **Recommended IHC Protocol**

Step	ImmunoDetector AP/HRP	PolyDetector AP/HRP	PolyDetector Plus HRP	
Peroxidase/AP Blocker	5 min.	5 min.	5 min	
Primary Antibody	30-60 min.	30-60 min.	30-60 min.	
1st Step Detection	10 min.	30-45 min.	15 min.	
2nd Step Detection	10 min.	Not Applicable	15 min.	
Substrate-Chromogen	5-10 min.	5-10 min.	5-10 min.	
Counterstain	Varies	Varies	Varies	

## **Product Limitations**

Due to inherent variability present in immunohistochemical procedures (including fixation time of tissues, dilution factor of antibody, retrieval method utilized and incubation time), optimal performance should be established through the use of positive and negative controls. Results should be interpreted by a medical professional.

#### References

- 1. Navone F. et al. J Cell Biol. 1986:103:2511-2527
- 2. Wiedenmann B, et al. Cell. 1985;41:1017-1028
- 3. Kayser K, et al. Path Res Pract. 1988;183:412-417
- 4. U.S. Department of Health and Human Services: Centers for Disease Control and Prevention. Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories. Supplement / Vol. 61, January 6, 2012.

# Symbol Key / Légende des symboles/Erläuterung der Symbole

EC REP	EMERGO EUROPE Prinsessegracht 20 2514 AP The Hague The Netherlands	II _8°C	Storage Temperature Limites de température Zulässiger Temperaturbereich	***	Manufacturer Fabricant Hersteller	REF	Catalog Number Référence du catalogue Bestellnummer
IVD Disp	In Vitro Diagnostic Medical Device positif médical de diagnostic in vitro In-Vitro-Diagnostikum	[]i	Read Instructions for Use Consulter les instructions d'utilisation Gebrauchsanweisung beachten	$\sum$	Expiration Date Utiliser jusque Verwendbar bis	LOT	Lot Number Code du lot Chargenbezeichnung



