

# Anti-Serotonin transporter antibody [EPR23530-3] ab254358

Recombinant RabMAb

[1 References](#) [8 Images](#)

### Overview

<b>Product name</b>	Anti-Serotonin transporter antibody [EPR23530-3]
<b>Description</b>	Rabbit monoclonal [EPR23530-3] to Serotonin transporter
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> IHC-P, IP, IHC-Fr <b>Unsuitable for:</b> Flow Cyt, ICC/IF or WB
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat
<b>Immunogen</b>	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	IHC-P: Mouse and rat cerebrum tissue. IHC-Fr: Mouse cerebrum tissue. IP: Mouse and rat brain tissue lysate.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol, 0.05% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR23530-3

Isotype

IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab254358 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		1/2000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
IP		1/30.
IHC-Fr		1/50. Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).

### Application notes

Is unsuitable for Flow Cyt, ICC/IF or WB.

## Target

### Function

Serotonin transporter whose primary function in the central nervous system involves the regulation of serotonergic signaling via transport of serotonin molecules from the synaptic cleft back into the pre-synaptic terminal for re-utilization. Plays a key role in mediating regulation of the availability of serotonin to other receptors of serotonergic systems. Terminates the action of serotonin and recycles it in a sodium-dependent manner.

### Tissue specificity

Expressed in platelets (at protein level).

### Sequence similarities

Belongs to the sodium:neurotransmitter symporter (SNF) (TC 2.A.22) family. SLC6A4 subfamily.

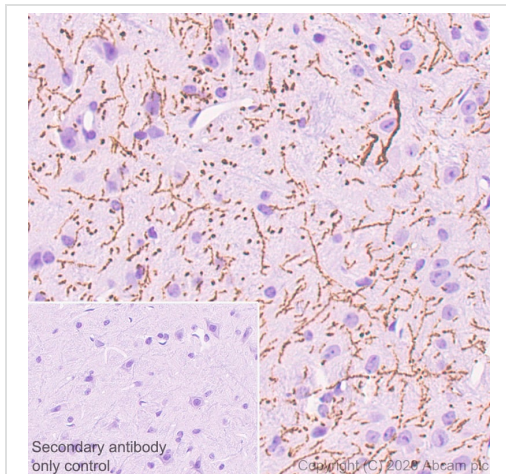
### Post-translational modifications

Glycosylated; modification with sialylated N-glycans is a requirement for transporters to associate with each other and to function as homooligomeric forms.  
Phosphorylated at Ser-611, Thr-613 and Thr-616.

### Cellular localization

Cell membrane. Endomembrane system. Endosome membrane. Translocates from intracellular locations to the plasma membrane. Density of transporter molecules on the plasma membrane is itself regulated by serotonin.

## Images

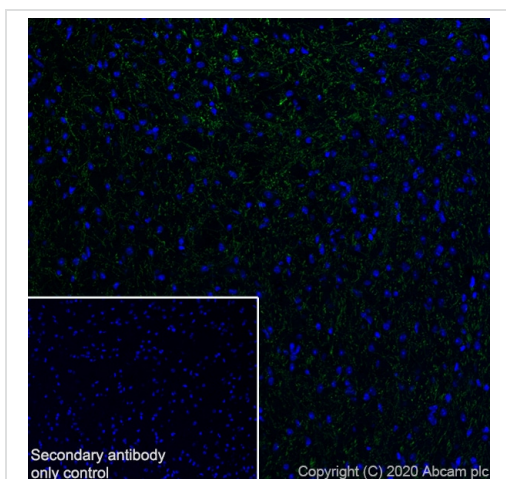


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Serotonin transporter antibody [EPR23530-3] (ab254358)

Immunohistochemical analysis of paraffin-embedded mouse cerebrum tissue labeling Serotonin transporter with ab254358 at 1/2000 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Positive staining on mouse cerebrum (PMID 23127756). The section was incubated with ab254358 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

Heat mediated antigen retrieval with Citrate buffer (pH 6.0, epitope retrieval solution 1) for 20 mins.

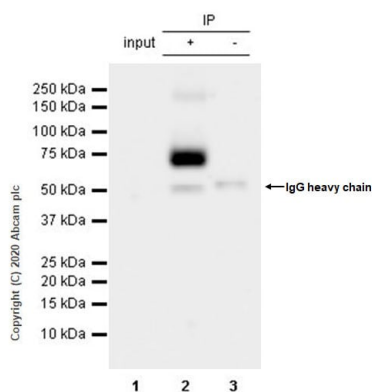


Immunohistochemistry (Frozen sections) - Anti-Serotonin transporter antibody [EPR23530-3] (ab254358)

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen mouse cerebrum tissue labeling Serotonin transporter with ab254358 at 1/50 dilution followed by **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution (Green). Positive staining on synapses of neurons in mouse cerebrum is observed. The nuclear counterstain was DAPI (Blue).

Secondary antibody control: Secondary antibody is **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution.

Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).



Immunoprecipitation - Anti-Serotonin transporter antibody [EPR23530-3] (ab254358)

Serotonin transporter was immunoprecipitated from 0.35 mg mouse brain tissue lysate with ab254358 at 1/30 dilution (2µg in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab254358 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP)([ab131366](#)) was used at 1/5000 dilution.

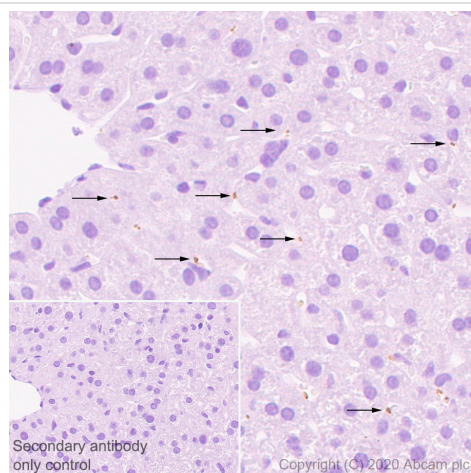
**Lane 1:** Mouse brain tissue lysate 10 µg

**Lane 2:** ab254358 IP in mouse brain tissue lysate

**Lane 3:** Rabbit monoclonal IgG ([ab172730](#)) instead of ab254358 in mouse brain tissue lysate

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 15 seconds.

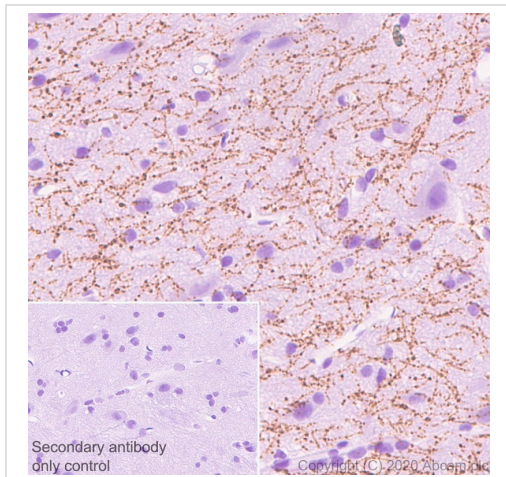


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Serotonin transporter antibody [EPR23530-3] (ab254358)

Immunohistochemical analysis of paraffin-embedded mouse liver tissue labeling Serotonin transporter with ab254358 at 1/2000 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)). Positive staining on platelets and **negative staining on hepatocytes** of mouse liver (PMID: 7869097). The section was incubated with ab254358 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)).

Heat mediated antigen retrieval with Citrate buffer (pH 6.0, epitope retrieval solution 1) for 20 mins.

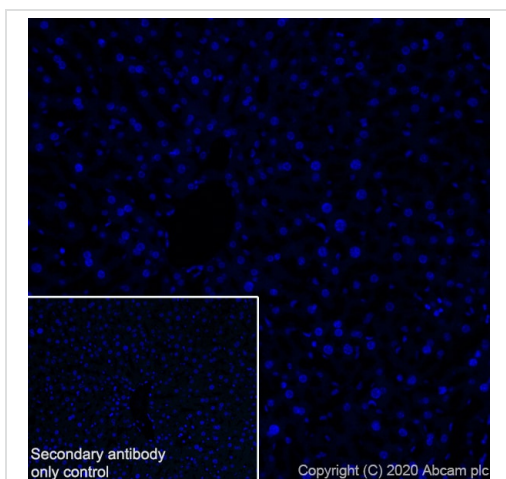


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Serotonin transporter antibody [EPR23530-3] (ab254358)

Immunohistochemical analysis of paraffin-embedded rat cerebrum tissue labeling Serotonin transporter with ab254358 at 1/2000 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Positive staining on rat cerebrum (PMID 23127756). The section was incubated with ab254358 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

Heat mediated antigen retrieval with Citrate buffer (pH 6.0, epitope retrieval solution 1) for 20 mins.



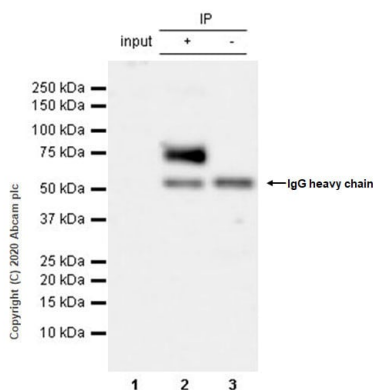
Immunohistochemistry (Frozen sections) - Anti-Serotonin transporter antibody [EPR23530-3] (ab254358)

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen mouse liver tissue labeling Serotonin transporter with ab254358 at 1/50 dilution followed by **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution (Green). The nuclear counterstain was DAPI (Blue).

**Negative control:** No staining on mouse liver (PMID: 9037532) is observed.

Secondary antibody control: Secondary antibody is **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution.

Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).



Immunoprecipitation - Anti-Serotonin transporter antibody [EPR23530-3] (ab254358)

Serotonin transporter was immunoprecipitated from 0.35 mg rat brain tissue lysate with ab254358 at 1/30 dilution (2µg in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab254358 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP)([ab131366](#)) was used at 1/5000 dilution.

**Lane 1:** Rat brain tissue lysate 10 µg

**Lane 2:** ab254358 IP in rat brain tissue lysate

**Lane 3:** Rabbit monoclonal IgG ([ab172730](#)) instead of ab254358 in rat brain tissue lysate

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 33 seconds.

#### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-Serotonin transporter antibody [EPR23530-3] (ab254358)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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