

## Product datasheet

# Anti-Somatostatin Receptor 2 antibody [UMB1] - C-terminal ab134152

Recombinant RabMAb

[111 References](#) [9 Images](#)

### Overview

---

<b>Product name</b>	Anti-Somatostatin Receptor 2 antibody [UMB1] - C-terminal
<b>Description</b>	Rabbit monoclonal [UMB1] to Somatostatin Receptor 2 - C-terminal
<b>Host species</b>	Rabbit
<b>Specificity</b>	The specificity of ab134152 was demonstrated in a Somatostatin Receptor 2-deficient mouse model. Refer to Fischer et al.
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P <b>Unsuitable for:</b> Flow Cyt, ICC/IF or IHC-Fr
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers. (Peptide available as <a href="#">ab171899</a> )
<b>Positive control</b>	WB: Human and mouse brain tissue lysate. U937, INS-1 and Somatostatin Receptor 2 transfected HEK-293 cell lysates. IHC-P: Human pancreas, brain and breast carcinoma tissues.
<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> <p><b>We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.</b></p>

### Properties

---

**Form** Liquid

<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.
<b>Storage buffer</b>	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59.49% PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	UMB1
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab134152 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
<b>WB</b>		1/1000 - 1/10000. Detects a band of approximately 75-80 kDa (predicted molecular weight: 41 kDa). Can be blocked with <b><u>Somatostatin Receptor 2 peptide (ab171899)</u></b> . <b>This antibody works better in 1% SDS Hot Lysates in WB. For Lysate preparation protocol, please refer to the protocol book in the protocol section and/or <a href="#">here</a> (downloadable copy).</b>
<b>IHC-P</b>		1/100 - 1/2000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

**Application notes** Is unsuitable for Flow Cyt, ICC/IF or IHC-Fr.

## Target

<b>Function</b>	Receptor for somatostatins-14 and -28. This receptor is coupled via pertussis toxin sensitive G proteins to inhibition of adenylyl cyclase. In addition it stimulates phosphotyrosine phosphatase and PLC via pertussis toxin insensitive as well as sensitive G proteins. In RIN-5F cells, this receptor inhibits calcium entry by suppressing voltage dependent calcium-channels.
<b>Tissue specificity</b>	Cerebrum and kidney. In lesser amounts in jejunum, colon and liver.
<b>Sequence similarities</b>	Belongs to the G-protein coupled receptor 1 family.
<b>Cellular localization</b>	Cell membrane.

## Images

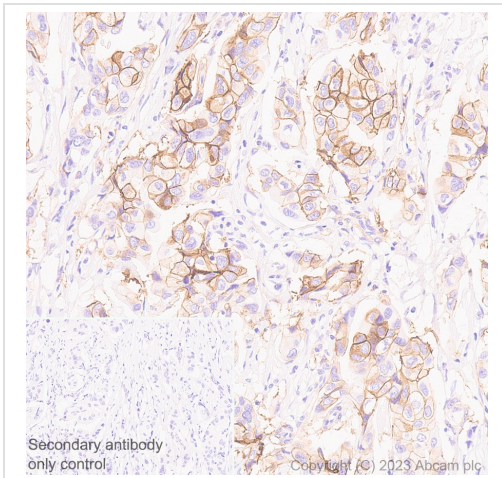
Tissue Microarray (TMA) data for ab134152			
Normal tissue samples		Malignant tissue samples	
Human cardiac muscle	x	Human placenta	x (immature cells ✓)
Human cerebrum	✓	Human skeletal muscle	x
Human colon	✓	Human skin	x
Human endometrium	x	Human spleen	✓
Human kidney	✓	Human stomach	✓
Human liver	x	Human testis	x
Human lung	x	Human thyroid	x
Human mammary gland	x	Human tonsil	✓
Human pancreas	x (parenchymal sites ✓)		
		Clear cell carcinoma of human kidney	x (endothelial cells ✓)
		Human bladder cancer	x (endothelial cells ✓)
		Human breast carcinoma	✓
		Human cervical carcinoma	x (endothelial cells ✓)
		Human colon carcinoma	x (endothelial cells ✓)
		Human endometrial carcinoma	x (endothelial cells ✓)
		Human gastric adenocarcinoma	x
		Human glioma	✓
		Human hepatocellular carcinoma	✓
		Human lung carcinoma	x (immature cells ✓)
		Human ovarian carcinoma	x
		Human pancreatic carcinoma	x (immature cells ✓)
		Human prostatic hyperplasia	x (endothelial cells ✓)
		Human thyroid carcinoma	x (endothelial cells ✓)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Somatostatin Receptor 2 antibody [UMB1] - C-terminal (ab134152)

Tissue Microarrays stained for Anti-Somatostatin Receptor 2 antibody [UMB1] using ab134152 in immunohistochemical analysis. This table provides a detailed overview of positive (tick mark) and negative (cross mark) staining per sample type tested. The sections were incubated with ab134152 for 30 mins at room temperature used at 1:2000 dilution (0.928 µg/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection) secondary antibody. Counterstain was Hematoxylin.

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument.



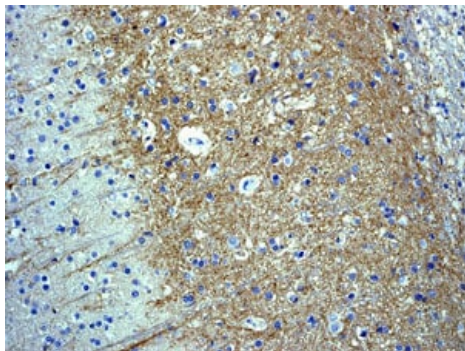
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Somatostatin Receptor 2 antibody [UMB1] - C-terminal (ab134152)

Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue labelling Somatostatin Receptor 2 with ab134152 at 1/2000 dilution (0.928 µg/ml) followed by a LeicaDS9800 (Bond™ Polymer Refine Detection) at a ready to use dilution. Positive staining on human breast carcinoma. The section was incubated with ab134152 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 LeicaDS9800 (Bond™ Polymer Refine Detection) at a ready to use dilution.

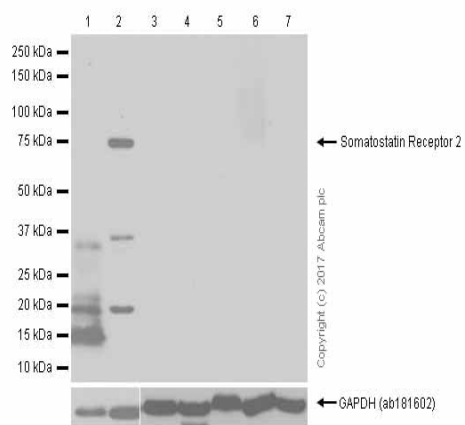
Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Somatostatin Receptor 2 antibody [UMB1] - C-terminal (ab134152)

Immunohistochemical analysis of paraffin embedded human brain tissue labeled with ab134152 at 1/100 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Western blot - Anti-Somatostatin Receptor 2 antibody [UMB1] - C-terminal (ab134152)

**All lanes** : Anti-Somatostatin Receptor 2 antibody [UMB1] - C-terminal (ab134152) at 1/1000 dilution

**Lane 1** : U937 (Human histiocytic lymphoma monocyte) whole cell lysates prepared in RIPA lysis method

**Lane 2** : U937 (Human histiocytic lymphoma monocyte) whole cell lysates prepared in 1% SDS hot lysis method

**Lane 3** : MCF-7 (Human breast adenocarcinoma epithelial cell) whole cell lysates prepared in RIPA lysis method

**Lane 4** : MCF-7 (Human breast adenocarcinoma epithelial cell) whole cell lysates prepared in 1% SDS hot lysis method

**Lane 5** : MDA-MB-231 (Human breast adenocarcinoma epithelial cell) whole cell lysates prepared in RIPA lysis method

**Lane 6** : MDA-MB-231 (Human breast adenocarcinoma epithelial cell) whole cell lysates prepared in 1% SDS hot lysis method

**Lane 7** : A549 (Human lung carcinoma epithelial cell) whole cell lysates prepared in RIPA lysis method

Lysates/proteins at 15 µg per lane.

### Secondary

**All lanes** : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

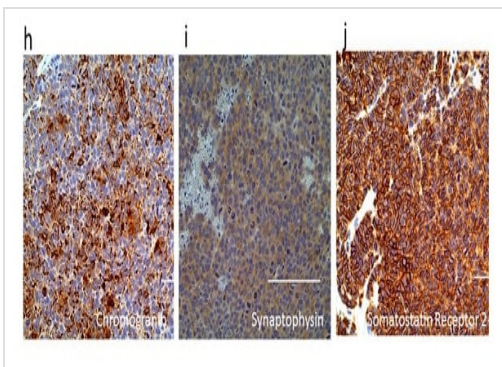
**Predicted band size:** 41 kDa

**Observed band size:** 73 kDa

**Exposure time:** 3 minutes

**Blocking and diluting buffer:** 5% NFD/MTBST.

This antibody doesn't work in MCF-7 and MDA-MB-231 cells which should be positive (PMID: 16519802). A549 cell is Somatostatin Receptor 2 negative cell line (PMID: 19148511).



Immunohistochemical analysis of paraffin-embedded human cervical cancer xenograft tissue (cells derived from liver metastases) using ab134152 at 1/100 dilution.

Somatostatin Receptor 2 is detected using ab134152.

From Figure 1 of Yuan et al.

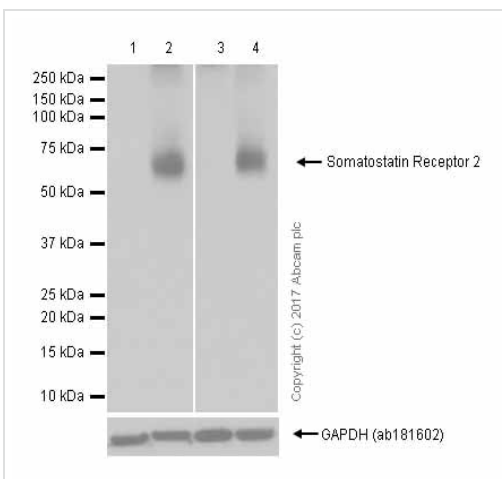
Yuan et al **Sci Rep.** 2017; 7: 45617. Published online 2017 Apr 5. doi: [10.1038/srep45617](https://doi.org/10.1038/srep45617)

Reproduced under the Creative Commons

Licence <http://creativecommons.org/licenses/by/4.0/>

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Somatostatin Receptor 2 antibody [UMB1] - C-terminal (ab134152)

Yuan et al Sci Rep. 2017; 7: 45617. Published online 2017 Apr 5. doi: 10.1038/srep45617



**All lanes :** Anti-Somatostatin Receptor 2 antibody [UMB1] - C-terminal (ab134152) at 1/1000 dilution

**Lane 1 :** Human brain lysates prepared in RIPA lysis method

**Lane 2 :** Human brain lysates prepared in 1% SDS hot lysis method

**Lane 3 :** Mouse brain lysates prepared in RIPA lysis method

**Lane 4 :** Mouse brain lysates prepared in 1% SDS hot lysis method

Lysates/proteins at 15 µg per lane.

**Secondary**

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Western blot - Anti-Somatostatin Receptor 2 antibody [UMB1] - C-terminal (ab134152)

**Predicted band size:** 41 kDa

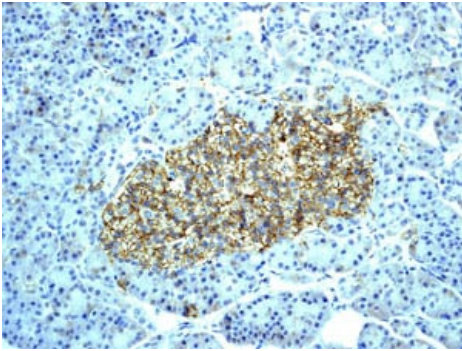
**Observed band size:** 73 kDa

Blocking and diluting buffer: 5% NFDM/TBST.

**Exposure time:**

Lane 1 and 2: 1 second.

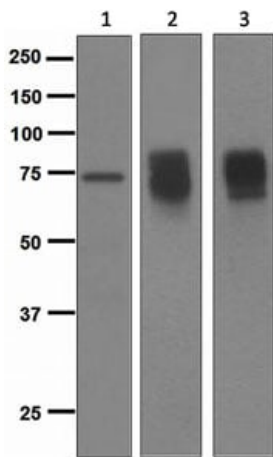
Lane 3 and 4: 5 seconds.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Somatostatin Receptor 2 antibody [UMB1] - C-terminal (ab134152)

Immunohistochemical analysis of paraffin embedded human pancreas tissue labeled with ab134152 at 1/100 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Western blot - Anti-Somatostatin Receptor 2 antibody [UMB1] - C-terminal (ab134152)

**All lanes :** Anti-Somatostatin Receptor 2 antibody [UMB1] - C-terminal (ab134152) at 1/1000 dilution

**Lane 1 :** U937 (Human histiocytic lymphoma cell line) cell lysates

**Lane 2 :** INS-1 cell lysates

**Lane 3 :** Somatostatin Receptor 2 transfected HEK-293 (Human epithelial cell line from embryonic kidney) cell lysates

Lysates/proteins at 10 µg per lane.

**Secondary**

**All lanes :** HRP labeled goat anti-rabbit at 1/2000 dilution

**Predicted band size:** 41 kDa

### 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-Somatostatin Receptor 2 antibody [UMB1] - C-terminal (ab134152)

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

### Our Abpromise to you: Quality guaranteed and expert technical support

---

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

### Terms and conditions

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors