# abcam

# Product datasheet

# Anti-Somatostatin Receptor 5 antibody [UMB4] ab109495



# 41 References 4 Images

Overview

Product name Anti-Somatostatin Receptor 5 antibody [UMB4]

**Description** Rabbit monoclonal [UMB4] to Somatostatin Receptor 5

Host species Rabbit

**Specificity** Internal WB test in PANC-1, human pancreas and human brain lysates indicates this antibody

might not detect endogenous Somatostatin Receptor 5.

Tested applications Suitable for: WB, IHC-P

Unsuitable for: Flow Cyt or ICC/IF

Species reactivity Reacts with: Human

**Immunogen** Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: HT29 whole cell lysate (ab3952), 293T (Human embryonic kidney epithelial cell) transfected

with human SSTR5 expression vector, IHC-P: Human pancreas

**General notes**This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**<sup>®</sup> **patents**.

#### **Properties**

Form Liquid

**Storage instructions** Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Stable for 12 months at -20°C.

Storage buffer pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA

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Purity Protein A purified

**Clonality** Monoclonal

Clone number UMB4

**Isotype** IgG

### **Applications**

The Abpromise guarantee Our Abpromise guarantee covers the use of ab109495 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
WB		1/1000 - 1/10000. Predicted molecular weight: 39 kDa. Internal WB test in PANC-1, human pancreas and human brain lysates indicates this antibody might not detect endogenous Somatostatin Receptor 5.
IHC-P		1/50. Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol. For unpurified use at 1/100-1/250  See IHC antigen retrieval protocols.

**Application notes** Is unsuitable for Flow Cyt or ICC/IF.

### **Target**

**Function** Receptor for somatostatin 28 and to a lesser extent for somatostatin-14. The activity of this

receptor is mediated by G proteins which inhibit adenylyl cyclase.

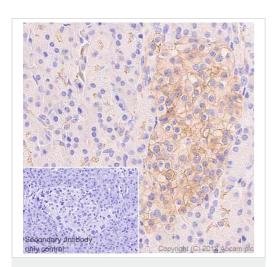
Tissue specificity Adult pituitary gland, heart, small intestine, adrenal gland, cerebellum and fetal hypothalamus. No

expression in fetal or adult kidney, liver, pancreas, uterus, spleen, lung, thyroid or ovary.

**Sequence similarities**Belongs to the G-protein coupled receptor 1 family.

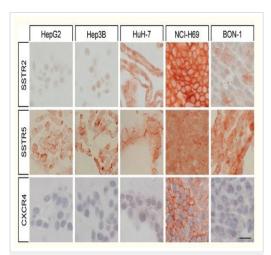
**Cellular localization** Cell membrane.

#### **Images**



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Somatostatin Receptor 5 antibody [UMB4] (ab109495)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human pancreas tissue sections labeling Somatostatin Receptor 5 with Purified ab109495 at 1:50 dilution (16.3 µg/ml). Heat mediated antigen retrieval was performed with Tris/EDTA buffer (pH 9.0, epitope retrieval solution 2) for 10mins.. Performed on a Leica Biosystems BOND ® RX instrument.was used as the secondary antibody.Negative control:PBS instead of the primary antibody.Hematoxylin was used as a counterstain.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Somatostatin Receptor 5 antibody [UMB4] (ab109495)

Kaemmerer, D. et al BMC Cancer. 2017 Dec 28;17(1):896. doi: 10.1186/s12885-017-3911-3 Reproduced under the Creative Commons license https://creativecommons.org/licenses/by/4.0/

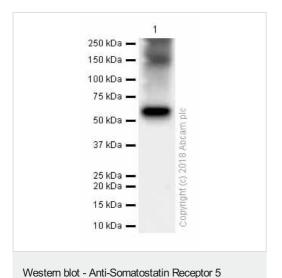
Somatostatin receptor 2 (SSTR2), somatostatin receptor 5 (SSTR5) and CXCR4 expression in the hepatoblastoma cell line HepG2 and in the hepatoma cell lines Hep3B and HuH-7 in comparison to the small cell lung cancer cell line NCI-H69 and the neuroendocrine tumor cell line BON-1. Immunohistochemistry (redbrown color), counterstaining with hematoxylin; scale bar: 20  $\mu m$ . Representative photomicrographs of three independent batches are shown.

HepG2, Hep3B, HuH-7, NCI-H-69, and BON-1 cells (DSMZ, Braunschweig, Germany) were grown in 75 cm² culture flasks to a confluency of 80%. Cells were washed once with phosphate-buffered saline and transferred into 10% buffered formalin (J.T.Baker, Deventer, The Netherlands) for 2 h. After centrifugation for 10 min at 3500 x g, the supernatant was removed, and 1 ml human pool plasma was added to the cell samples. After brief vortexing, 100  $\mu$ l human fibrinogen (50–70% protein; ≥80% clottable) was added to each sample, and the samples were vortexed again. The resulting clots were placed for another 24 h in

10% buffered formalin and embedded in paraffin blocks.

(After Kaemmerer, D. et al **BMC Cancer.** 2017 Dec 28;17(1):896. doi: 10.1186/s12885-017-3911-3).

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antibody [UMB4] (ab109495)

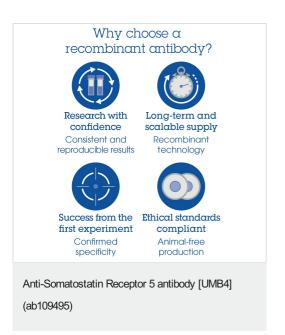
Anti-Somatostatin Receptor 5 antibody [UMB4] (ab109495) at 0.08  $\mu$ g/ml (purified) + 293T (Human embryonic kidney epithelial cell) transfected with human SSTR5 expression vector, whole cell lysate at 15  $\mu$ g

#### Secondary

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

Predicted band size: 39 kDa

Blocking and diluting buffer: 5% NFDM/TBST



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