

# Datasheet: MCA5924 BATCH NUMBER 164039

Description:	MOUSE ANTI HUMAN SOMATOSTATIN RECEPTOR 1		
Specificity:	SOMATOSTATIN RECEPTOR 1		
Format:	Purified		
Product Type:	Monoclonal Antibody		
Clone:	sstr1		
Isotype:	lgG1		
Quantity:	0.2 mg		

### **Product Details**

#### **Applications**

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			•	
Immunohistology - Frozen			•	
Immunohistology - Paraffin	•			1/100 - 1/250
ELISA				
Immunoprecipitation			•	
Western Blotting		•		

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species	Human
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN <sub>3</sub> )
Carrier Free	Yes

Approx. Protein Concentrations	IgG concentration 1mg/ml
Immunogen	Synthetic peptide, sequence CKSRAYSVEDFQPENLE
External Database Links	UniProt: P30872 Related reagents
	Entrez Gene:
	6751 SSTR1 Related reagents

#### **Specificity**

**Mouse anti Human Somatostatin receptor 1, clone sstr1** recognizes the type I somatostatin receptor also known as SRIF-2. The human somatostatin receptor type 1 is a 391 amino acid, ~50 kDa multi pass transmembrane glycoprotein belonging to the G-protein coupled receptor 1 family.

Somatostatin (SST) is a peptide hormone with wide ranging inhibitory effects on hormone secretion and cell proliferation. It is produced as a large preproSST precursor molecule that is cleaved to yield one of two active forms of the peptide: a 14 amino acid peptide (SST-14), or a 28 amino acid peptide (SST-28). The inhibitory effects of SST on hormone release and cell growth have made them candidates for the treatment of cancer and neuroendocrine disorders. Natural SSTs have very short half-lives, which led to the development of more stable synthetic derivatives, such as octreotide and lanreotide, both in common clinical use.

The effects of SST are mediated via five distinct SST receptors (SSTRs). The receptors have similar affinities for natural SST-14 and SST-28, but there are marked differences in affinities towards the synthetic analogues. Somatostatin receptors are expressed by various tissues, notably neuronal, endocrine, gastrointestinal and immune cells, as well as certain tumours, with tumours often expressing more than one subtype in different combinations.

Clone sstr1 specifically recognises SSTR type 1, but none of the other SSTR subtypes. Bio-Rad also has antibodies to other somatostatin receptors available

# Histology Positive Control Tissue

## Human pancreas

#### References

- 1. Schmid, H.A. *et al.* (2012) Monoclonal antibodies against the human somatostatin receptor subtypes 1-5: development and immunohistochemical application in neuroendocrine tumors. <u>Neuroendocrinology</u>. 95 (3): 232-47.
- 2. Ozkaya, H.M. *et al.* (2018) Germline mutations of aryl hydrocarbon receptor-interacting protein (AIP) gene and somatostatin receptor 1-5 and AIP immunostaining in patients with sporadic acromegaly with poor versus good response to somatostatin analogues. <u>Pituitary.</u> 21 (4): 335-6.
- 3. Leijon, H. *et al.* (2018) Variable somatostatin receptor subtype expression in 151 primary pheochromocytomas and paragangliomas. <u>Hum Pathol. Dec 07 [Epub ahead of Pathol. Dec 07 [Ep</u>

#### print].

Storage

This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

Guarantee

12 months from date of despatch

Health And Safety
Information

Material Safety Datasheet documentation #10040 available at:
https://www.bio-rad-antibodies.com/SDS/MCA5924
10040

Regulatory

For research purposes only

#### Related Products

#### **Recommended Secondary Antibodies**

Goat Anti Mouse IgG (STAR77...) HRP
Rabbit Anti Mouse IgG (STAR12...) RPE

Rabbit Anti Mouse IgG (STAR8...) DyLight®800

Goat Anti Mouse IgG (STAR76...) RPE

Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP

Goat Anti Mouse IgG IgA IgM (STAR87...) Alk. Phos., HRP

Rabbit Anti Mouse IgG (STAR13...) HRP

Goat Anti Mouse IgG (STAR70...) FITC

Rabbit Anti Mouse IgG (STAR9...) FITC

Goat Anti Mouse IgG (H/L) (STAR117...) Alk. Phos., DyLight®488, DyLight®550,

DyLight®650, DyLight®680, DyLight®800,

FITC, HRP

#### **Recommended Negative Controls**

#### MOUSE IgG1 NEGATIVE CONTROL (MCA928)

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M381334:210512'

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