

## Datasheet: MCA2887

<b>Description:</b>	MOUSE ANTI SOS1
<b>Specificity:</b>	SOS1
<b>Other names:</b>	SON OF SEVENLESS HOMOLOG 1
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	SOS-01
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.1 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 [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA	▪			
Immunoprecipitation			▪	
Western Blotting	▪			1.0ug/ml
Immunofluorescence	▪			

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.

<b>Target Species</b>	Human
<b>Species Cross Reactivity</b>	<p>Reacts with: Mouse</p> <p><b>N.B.</b> Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.</p>
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture

supernatant

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**Buffer Solution** Phosphate buffered saline

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**Preservative Stabilisers** <0.1% Sodium Azide (NaN<sub>3</sub>)

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**Approx. Protein Concentrations** IgG concentration 1.0mg/ml

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**Immunogen** Synthetic peptide corresponding to amino acids THPSMHRDGPPLLENAHSS of human SOS1.

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**External Database Links**

**UniProt:**

[Q07889](#)

[Related reagents](#)

**Entrez Gene:**

[6654](#)

SOS1

[Related reagents](#)

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**RRID** AB\_2192440

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**Specificity**

**Mouse anti Human SOS1 antibody, clone SOS-01** recognizes SOS1 (son of sevenless homolog 1), a ubiquitously expressed 1333 amino acid ~150 kDa intracellular protein and bifunctional guanine nucleotide exchange factor (GEF), which plays a role in growth and differentiation signalling pathways and in actin reorganization, by acting as a regulator of Ras and Rac/Rho GTPases.

Mutations in the SOS1 gene are responsible for the rare oral overgrowth condition known as gingival fibromatosis 1 ([Hart et al. 2002](#)), and also the cause of the relatively common autosomal dominant disorder Noonan syndrome type 4 ([NS4](#)), characterized by short stature, congenital heart malformation, bleeding diathesis and distinctive facial features ([Hanna et al. 2009](#)).

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**Western Blotting**

MCA2887 detects a band of approximately 150kDa in K562 and RAJI human cell lysates under reducing conditions.

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**Further Reading**

1. Scita, G. *et al.* (2000) Signaling from Ras to Rac and beyond: not just a matter of GEFs. [EMBO J. 19 \(11\): 2393-8.](#)

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**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.

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**Guarantee**

12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10040 available at:  
<https://www.bio-rad-antibodies.com/SDS/MCA2887>  
10040

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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...) [RPE](#)  
Goat Anti Mouse IgG IgA IgM (STAR87...) [HRP](#)  
Goat Anti Mouse IgG (STAR76...) [RPE](#)  
Goat Anti Mouse IgG (STAR70...) [FITC](#)  
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)  
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)  
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)  
Goat Anti Mouse IgG (STAR77...) [HRP](#)  
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 \(MCA928\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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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](https://www.bio-rad-antibodies.com/datasheets)  
'M410523:221028'

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