

Datasheet: MCA5692GA

**BATCH NUMBER 150981**

<b>Description:</b>	MOUSE ANTI HUMAN SULFATASE 2 (C-TERMINAL)
<b>Specificity:</b>	SULFATASE 2 (C-TERMINAL)
<b>Other names:</b>	SULF-2
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	2B4
<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 (1)	▪			
ELISA	▪			
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.

**(1) This product requires antigen retrieval using heat treatment prior to staining of paraffin sections. Sodium citrate buffer pH 6.0 is recommended for this purpose.**

<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 G.
<b>Buffer Solution</b>	Phosphate buffered saline.
<b>Preservative Stabilisers</b>	0.09% Sodium Azide.
<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0mg/ml
<b>Immunogen</b>	Recombinant human Sulf-2.
<b>External Database Links</b>	<p><b>UniProt:</b></p> <p><a href="#">Q8IWU5</a>    <a href="#">Related reagents</a></p> <p><a href="#">Q8CFG0</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b></p> <p><a href="#">55959</a>    SULF2    <a href="#">Related reagents</a></p> <p><a href="#">72043</a>    Sulf2    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	KIAA1247
<b>RRID</b>	AB_10707932
<b>Specificity</b>	<p><b>Mouse anti Human Sulfatase 2 (C-Terminal) antibody, clone 2B4</b> recognizes an epitope within the C-terminal (CT) subunit of Sulfatase 2 (Sulf-2). Sulf-2 is a novel extracellular heparan sulfate 6-O-endosulfatase, which selectively removes the critical sulfate group from the polysaccharide side chain of heparan sulfate proteoglycans, major components of the extracellular matrix, involved in cell differentiation, proliferation and migration. Sulf-2 acts as a modulator of several signalling proteins including Wnt proteins, bone morphogenetic proteins (BMPs) and fibroblast growth factors (FGFs), and is a direct transcriptional target of p53. Studies have linked Sulf-2 with several cancers, including breast, hepatocellular, and pancreatic cancer, and recently with non-small-cell lung carcinomas (<a href="#">Lemjabbar-Alaoui et al. 2010</a>).</p> <p>Mature human Sulf-2 is a heterodimer consisting of a 50 kDa C-terminal subunit, essential for both glucosamine 6-O-sulfate-endosulfatase and arylsulfatase activity, and a 75 kDa N-terminal subunit which contains the catalytic centre.</p> <p>Mouse anti Human Sulfatase 2 (C-Terminal) antibody, clone 2B4 recognizes Sulfatase 2, showing no cross-reactivity with Sulfatase 1 in either human or mouse.</p>
<b>Histology Positive Control Tissue</b>	Sulf-2 transfected HEK29 cells or non-small-cell lung carcinoma.
<b>Western Blotting</b>	Mouse anti Human sulfatase 2 antibody, clone 2B4 detects a major band of ~50kDa in

Sulf-2 transfected HEK293 cell lysates. A band at 135kDa (unprocessed protein), and a fragment at 37kDa, may also be present.

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**References**

1. Lemjabbar-Alaoui, H. *et al.* (2010) Sulf-2, a heparan sulfate endosulfatase, promotes human lung carcinogenesis. [Oncogene. 29 \(5\): 635-46.](#)
2. Lui NS *et al.* (2012) SULF2 expression by immunohistochemistry and overall survival in oesophageal cancer: a cohort study. [BMJ Open. 2 \(6\): pii: e001624.](#)
3. Alhasan, S.F. *et al.* (2016) Sulfatase-2: a prognostic biomarker and candidate therapeutic target in patients with pancreatic ductal adenocarcinoma. [Br J Cancer. 115 \(7\): 797-804.](#)
4. Phillips, J.J. *et al.* (2012) Heparan sulfate sulfatase SULF2 regulates PDGFR $\alpha$  signaling and growth in human and mouse malignant glioma. [J Clin Invest. 122 \(3\): 911-22.](#)

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**Storage**

Store at +4°C or at -20°C if preferred.  
Storage in frost-free freezers is not recommended.  
This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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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/MCA5692GA>  
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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](#)

**North & South America** Tel: +1 800 265 7376  
Fax: +1 919 878 3751  
Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)

**Worldwide** Tel: +44 (0)1865 852 700  
Fax: +44 (0)1865 852 739  
Email: [antibody\\_sales\\_uk@bio-rad.com](mailto:antibody_sales_uk@bio-rad.com)

**Europe** Tel: +49 (0) 89 8090 95 21  
Fax: +49 (0) 89 8090 95 50  
Email: [antibody\\_sales\\_de@bio-rad.com](mailto:antibody_sales_de@bio-rad.com)

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