Datasheet: MCA5692GA

BATCH NUMBER 170218

Description:	MOUSE ANTI HUMAN SULFATASE 2 (C-TERMINAL)
Specificity:	SULFATASE 2 (C-TERMINAL)
Other names:	SULF-2
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	2B4
Isotype:	IgG1
Quantity:	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.

	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.**

Target Species

Human

Species Cross Reactivity

Reacts with: Mouse

N.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.

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.
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0mg/ml
Immunogen	Recombinant human Sulf-2.
External Database Links	**UniProt:** Q8IWU5 Related reagents Q8CFG0 Related reagents **Entrez Gene:** 55959 SULF2 Related reagents 72043 Sulf2 Related reagents
Synonyms	KIAA1247
RRID	AB_10707932
Specificity	**Mouse anti Human Sulfatase 2 (C-Terminal) antibody, clone 2B4** 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. Sulf-2 is linked with several cancers, including breast, hepatocellular, pancreatic and non-small-cell lung carcinomas (Lemjabbar-Alaoui *et al.* 2010). 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. 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.
Histology Positive Control Tissue	Sulf-2 transfected HEK29 cells or non-small-cell lung carcinoma.

Western Blotting	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.
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. Phillips, J.J. *et al.* (2012) Heparan sulfate sulfatase SULF2 regulates PDGFRα signaling and growth in human and mouse malignant glioma. J Clin Invest. 122 (3): 911-22. 4. 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.
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/MCA5692GA 10040
Regulatory	For research purposes only

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)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: 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	**Europe**	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com

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

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