Datasheet: MCA5962GA

Description:	MOUSE ANTI HUMAN CHI3L1
Specificity:	CHI3L1
Other names:	YKL-40
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	C02-4H12
Isotype:	IgG2b
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
ELISA	▪			

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 G from ascites

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% Sodium Azide (NaN_3)

Approx. Protein Concentrations

IgG concentration 1.0 mg/ml

Immunogen

E. coli derived recombinant protein corresponding to aa 22-383 of human CHI3L1/YKL-40

External Database Links

UniProt:

P36222 Related reagents

Entrez Gene:

1116 CHI3L1 Related reagents

Fusion Partners	Spleen cells from immunised BALB/c mouse were fused with cells of the mouse myeloma SP2/0 cell line
Specificity	**Mouse anti Human CHI3L1, clone C02-4H12,** recognizes human CHI3L1 (also known as HCgp39 & YKL-40). CHI3L1 is a secreted glcoprotein belonging to the family of chitinase-like lectins but lacking enzymatic properties. CHI3L1 is produced by smooth muscle cells, macrophages, neutrophils, chondrocytes and osteosarcoma cels. While the general mode of action remains to determined, CHI3L1 has been implicated in angiogenesis via VEGF signalling (Riabov *et al.* 2014). CHI3L1 has aslo emerged as a biomarker of many chronic inflammatory conditions such as Alzheimer`s disease (Craig-Schapiro *et al.* 2010), rheumatoid arthritis (Lee *et al.* 2011) and multiple sclerosis (Comabella *et al.* 2010).
Further Reading	1. Comabella, M. *et al.* (2010) Cerebrospinal fluid chitinase 3-like 1 levels are associated with conversion to multiple sclerosis Brain 133:1082-93. 2. Craig-Schapiro, R. *et al.* (2010) YKL-40: a novel prognostic fluid biomarker for preclinical Alzheimer's disease Biol Psychiatry. 68: 903-12. 3. Lee, C.G. *et al.* (2011) Role of Chitin and Chitinase/Chitinase-Like Proteins in Inflammation, Tissue Remodeling, and Injury Annual Review of Physiology 73: 479-501. 4. Riabov, V. *et al.* (2014) Role of tumor associated macrophages in tumor angiogenesis and lymphangiogenesis Front Physiol. 5: 75.
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.
Shelf Life	18 months from date of despatch.
Health And Safety Information	Material Safety Datasheet documentation available at: Material Safety Datasheet documentation #10040 available at https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos., HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos., DyLight®488, DyLight®549, DyLight®649, DyLight®680, DyLight®800, FITC, HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC, HRP
Rabbit Anti Mouse IgG (STAR8...)	DyLight®800
Goat Anti Mouse IgG (STAR70...)	FITC
Rabbit Anti Mouse IgG (STAR13...)	HRP

Human Anti Mouse IgG2b (HCA038...) FITC, HRP

Recommended Negative Controls

MOUSE IgG2b NEGATIVE CONTROL (MCA691)

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

'M259707:140925'

Printed on 13 Apr 2018

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