

Datasheet: MCA5962GA

Description:	MOUSE ANTI HUMAN CHI3L1		
Specificity:	CHI3L1		
Other names:	YKL-40		
Format:	Purified		
Product Type:	Monoclonal Antibody		
Clone:	C02-4H12		
Isotype:	lgG2b		
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
FLISA	-			

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 (<u>Riabov et al. 2014</u>). CHI3L1 has aslo emerged as a biomarker of many chronic inflammatory conditions such as Alzheimer's disease (<u>Craig-Schapiro et al. 2010</u>), rheumatoid arthritis (<u>Lee et al. 2011</u>) and multiple sclerosis (<u>Comabella et al. 2010</u>).

Further Reading

- 1. Comabella, M. *et al.* (2010) Cerebrospinal fluid chitinase 3-like 1 levels are associated with conversion to multiple sclerosis <u>Brain 133:1082-93.</u>
- 2. Craig-Schapiro, R. *et al.* (2010) YKL-40: a novel prognostic fluid biomarker for preclinical Alzheimer's disease <u>Biol Psychiatry</u>. 68: 903-12.
- 3. Lee, C.G. *et al.* (2011) Role of Chitin and Chitinase/Chitinase-Like Proteins in Inflammation, Tissue Remodeling, and Injury <u>Annual Review of Physiology 73: 479-501.</u>
- 4. Riabov, V. *et al.* (2014) Role of tumor associated macrophages in tumor angiogenesis and lymphangiogenesis <u>Front Physiol. 5: 75.</u>

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.

12 months from date of despatch

Health And Safety Information

Material Safety Datasheet documentation #10040 available at: 10040: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf

Regulatory

Guarantee

For research purposes only

Related Products

Recommended Secondary Antibodies

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

Goat Anti Mouse IgG (STAR77...)

Rabbit Anti Mouse IgG (STAR12...)

RPE

Rabbit Anti Mouse IgG (STAR8...) <u>DyLight®800</u>

Rabbit Anti Mouse IgG (STAR13...)

Goat Anti Mouse IgG (STAR76...)

Goat Anti Mouse IgG (STAR70...)

Goat Anti Mouse IgG (Fc) (STAR120...)

Rabbit Anti Mouse IgG (STAR9...)

FITC

Goat Anti Mouse IgG (H/L) (STAR117...) Alk. Phos., DyLight®488, DyLight®680,

DyLight®800, FITC, HRP

Recommended Negative Controls

MOUSE IgG2b NEGATIVE CONTROL (MCA691)

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Worldwide

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