

YKL-40 Reagents

Technical Data Sheet

Monoclonal Antibodies: Murine Monoclonal Anti-Human YKL-40

For Research Use Only. Not for use in Diagnostic Procedures.

Background

YKL-40, a member of the mammalian chitinase like protein class, is a 40 kDA heparin binding glycoprotein.¹⁻³ It shares amino acid sequence homology to non-mammalian chitinases but demonstrates no chitinase activity. The name YKL-40 is derived from the protein's molecular weight and three N-terminus amino acids (tyrosine, lysine and leucine).³

The biological function of YKL-40 remains largely unknown and is a field of extensive scientific debate. YKL-40 has been shown to be a potent growth factor for connective tissue cells⁸⁻⁹ and a potent migration factor for endothelial cells.⁵ Several research studies have demonstrated substantial levels of YKL-40 in environments with inflammation or where remodeling of the extracellular matrix (ECM) occurs,⁶⁻¹⁰ including various cancers, active rheumatoid arthritis, inflammatory bowel diseases, severe bacterial infections, and liver fibrosis.

Applications

Please contact Quidel Specialty Products Technical Services for application specific information.

EIA ⁵	RIA	WB ⁶	IHC	FACS
<20 ng/ml	N/T	>1:100	N/R	N/T

N/T = Not tested.
N/R = Not recommended.

Specifications

Catalog Number: 4813
Concentration: ≥ 1.0 mg/ml
Purity: > 95% by SDS PAGE
Volume/Vial: 100 μ l
Storage: Short term (30 days) 4 °C
Long term at or below -20 °C
Buffer: Borate Buffered Saline
(pH 8.4 \pm 0.2)
Isotype: IgG1k

References

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- 4 Tanwar, M.K., Gilbert, M., Holland E.C. Gene expression microarray analysis reveals YKL-40 to be a potential serum marker for malignant character in human glioma. Cancer Res. 62:4364-68 (2002).
- 5 Harvey, S. et al. Chondrex: new marker of joint disease. Clin Chem 44:509-16 (1998).
- 6 Tsark, E.C. et al. Differential MHC Class II-mediated presentation of rheumatoid arthritis autoantigens by human dendritic cells and macrophages. J. Immunol. 169:6625-33 (2002).
- 7 Volck B., et al. Studies on YKL-40 in knee joints of patients with rheumatoid arthritis and osteoarthritis. Involvement of YKL-40 in the joint

pathology. Osteoarthritis and Cartilage 9:203-14 (2001).

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10 Kim, S.H. et al. Prognostic implications of immunohistochemically detected YKL-40 expression in breast cancer. World J. of Surg. Onc. 5:17 (2007).

Ordering and Additional Information

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Related Products

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YKL-40 Protein	A442
Polyclonal Anti-Human YKL-40	4815



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