

YKL-40 Reagents

Technical Data Sheet

Polyclonal Antibodies: Rabbit 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 kD 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.¹⁰ Several research studies have demonstrated substantial levels of YKL-40 in environments with inflammation or where substantial remodeling of the extracellular matrix (ECM) occurs, including various cancers, active rheumatoid arthritis, inflammatory bowel diseases, severe bacterial infections, and liver fibrosis.

Applications

Because specific techniques differ from laboratory to laboratory, the following should be used as a guideline only. **YKL-40 can be detected conveniently using the MicroVue™ YKL-40 EIA Kit.**

EIA ⁴	RIA	WB ^{5,6}	IHC ⁷⁻¹⁰	FACS
< 20 ng/ml	N/T	1:100	1:1000	N/T

N/T = Not tested.

Specifications

Catalog Number: 4815
Concentration: 1 mg/ml
Purity: > 85% by SDS PAGE
Volume/Vial: 100 µl
Species: Rabbit
Method: Protein A
Buffer: 50 mM Phosphate
Buffered Saline

Species Cross Reactivity: This antibody has been shown to react specifically with YKL-40 from cynomolgus monkey and rhesus macaque. Other species cross reactivity has not been determined.

References

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- 6 Tsark, Differential MHC Class II-mediated presentation of rheumatoid arthritis autoantigens by human dendritic cells and macrophages. J. Immunol. 169:6625-6633 (2002).
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- 10 Kim, Prognostic implications of immunohistochemically detected YKL-40 expression in breast cancer. World Journal of Surgical Oncology. Vol. 5 (2007).

Ordering and Additional Information

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