

YKL-39 (H-80): sc-68413



The Power to Question

BACKGROUND

YKL-39, also known as CHI3L2 (chitinase 3-like 2) or YKL39, is a 390 amino acid cartilage protein that belongs to the chitinase family of chitin-fragmenting hydrolases. Highly expressed in chondrocytes (cartilage cells) and synovocytes (fibroblastic cells that line joint cavities), YKL-39 binds glycan structures with high affinity. Although related to bacterial chitinases, YKL-39 lacks the characteristic glutamate active site and thus does not have enzymatic chitinase activity. Patients affected with rheumatoid arthritis (RA) have autoimmunity against YKL-39, suggesting that YKL-39 is involved in osteoarthritic and/or rheumatoid joint disease. Additionally, YKL-39 is upregulated in early degenerative cartilage diseases (such as RA) and may be a marker of chondrocyte activation in these autoimmune conditions.

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CHROMOSOMAL LOCATION

Genetic locus: CHI3L2 (human) mapping to 1p13.3.

SOURCE

YKL-39 (H-80) is a rabbit polyclonal antibody raised against amino acids 96-175 mapping within an internal region of YKL-39 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

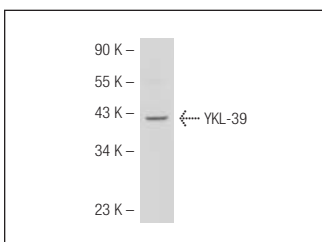
YKL-39 (H-80) is recommended for detection of YKL-39 precursor of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1–2 µg per 100–500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for YKL-39 siRNA (h): sc-63231.

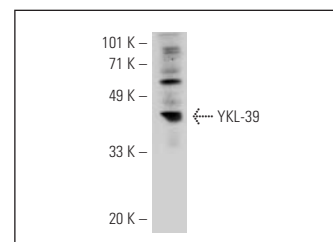
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



YKL-39 (H-80): sc-68413. Western blot analysis of YKL-39 expression in Jurkat whole cell lysate.



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RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.