

# L-ficolin (G-12): sc-55242

## BACKGROUND

L-ficolin, also called ficolin-2, ficolin-B (in mouse and rat), collagen/Fibrinogen domain-containing protein 2, serum lectin p35, EBP-37 or hucolin, is a 313 amino acid member of the ficolin lectin family. L-ficolin is a secreted innate immunity pattern recognition molecule expressed in liver and plasma that forms a disulfide-linked homopolymer. This extensive N-terminal disulfide bridge formation can lead to a functional dodecamer polypeptide. L-ficolin binds to DNA ligands expressed by late apoptotic and necrotic cells to increase attachment and engulfment. Variation in L-ficolin concentrations amongst individuals is associated with polymorphisms in the promoter and structural portion of the FCN2 gene. In patients with Behçet's disease (BD) there exists a significant difference in allele frequency for FCN2 gene single nucleotide polymorphisms (SNPs) within the -557 and -64 promoter sites within HLA-B51 positive and HLA-B51 negative subgroups.

## REFERENCES

- Lynch, N.J., et al. 2004. L-ficolin specifically binds to lipoteichoic acid, a cell wall constituent of Gram-positive bacteria, and activates the lectin pathway of complement. *J. Immunol.* 172: 1198-1202.
- Aoyagi, Y., et al. 2004. Role of L-ficolin/mannose-binding lectin-associated serine protease complexes in the opsonophagocytosis of type III group B streptococci. *J. Immunol.* 174: 418-425.
- Ma, Y.G., et al. 2004. Human mannose-binding lectin and L-ficolin function as specific pattern recognition proteins in the lectin activation pathway of complement. *J. Biol. Chem.* 279: 25307-25312.
- Krurup, A., et al. 2004. L-ficolin is a pattern recognition molecule specific for acetyl groups. *J. Biol. Chem.* 279: 47513-47519.
- Kuraya, M., et al. 2005. Specific binding of L-ficolin and H-ficolin to apoptotic cells leads to complement activation. *Immunobiology* 209: 689-697.
- Herpers, B.L., et al. 2005. Coding and non-coding polymorphisms in the lectin pathway activator L-ficolin gene in 188 Dutch blood bank donors. *Mol. Immunol.* 43: 851-855.
- Krurup, A., et al. 2005. Effect of capsulation of opportunistic pathogenic bacteria on binding of the pattern recognition molecules mannan-binding lectin, L-ficolin, and H-ficolin. *Infect. Immun.* 73:1052-1060.

## CHROMOSOMAL LOCATION

Genetic locus: FCN2 (human) mapping to 9q34.3.

## SOURCE

L-ficolin (G-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of L-ficolin 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.

Blocking peptide available for competition studies, sc-55242 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

L-ficolin (G-12) is recommended for detection of L-ficolin 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), immunohistochemistry (including paraffin-embedded sections) (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 L-ficolin siRNA (h): sc-105603, L-ficolin shRNA Plasmid (h): sc-105603-SH and L-ficolin shRNA (h) Lentiviral Particles: sc-105603-V.

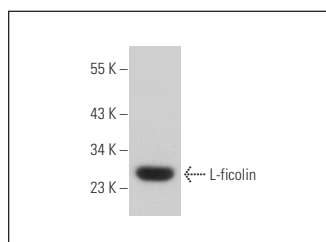
Molecular Weight of L-ficolin: 34 kDa.

Positive Controls: MDA-MB-231 cell lysate: sc-2232.

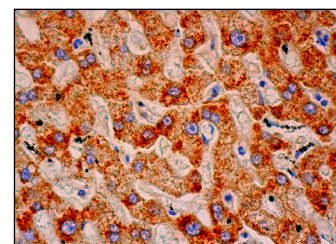
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## DATA



L-ficolin (G-12): sc-55242. Western blot analysis of L-ficolin expression in MDA-MB-231 whole cell lysate.



L-ficolin (G-12): sc-55242. Immunoperoxidase staining of formalin fixed, paraffin-embedded human liver tissue showing cytoplasmic staining of hepatocytes.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

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