

H-ficolin (G-15): sc-55202

BACKGROUND

H-ficolin (ficolin-3, collagen/fibrinogen domain-containing lectin 3 p35, hakata antigen) is a 299 amino acid protein encoded by the human gene FCN3. H-ficolin belongs to the ficolin lectin family and contains one collagen-like domain and one Fibrinogen C-terminal domain. Ficolins and mannose-binding lectin (MBL) are collagen-like defence proteins that serve as recognition molecules in lectin complement pathway. H-ficolin is a collagen-like defense molecule and is a known autoantigen in patients with systemic lupus erythematosus (SLE). Other collagen-like defense molecules, such as C1q, mannose-binding lectin (MBL) and L-ficolin, bind to apoptotic cells and mediate their clearance by phagocytic cells. Dysfunction in this mechanism is regarded as an important contributor to the pathophysiology of SLE. H-ficolin mediates the clearance of late apoptotic cells and is involved in the maintenance of tissue homeostasis and might play a protective role against the development of autoimmunity.

REFERENCES

1. Sugimoto, R., et al. 1998. Cloning and characterization of the Hakata antigen, a member of the ficolin/opsonin p35 lectin family. *J. Biol. Chem.* 273: 20721-20727.
2. Akaiwa, M., et al. 1999. Hakata antigen, a new member of the ficolin/opsonin p35 family, is a novel human lectin secreted into bronchus/alveolus and bile. *J. Histochem. Cytochem.* 47: 777-786.
3. Zhang, Z. and Henzel, W.J. 2004. Signal peptide prediction based on analysis of experimentally verified cleavage sites. *Protein Sci.* 13: 2819-2824.
4. Liu, T., et al. 2005. Human plasma N-glycoproteome analysis by immunofluorescence subtraction, hydrazide chemistry, and mass spectrometry. *J. Proteome Res.* 4: 2070-2080.

CHROMOSOMAL LOCATION

Genetic locus: FCN3 (human) mapping to 1p36.11.

SOURCE

H-ficolin (G-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of H-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-55202 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

H-ficolin (G-15) is recommended for detection of H-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 H-ficolin siRNA (h): sc-105432, H-ficolin shRNA Plasmid (h): sc-105432-SH and H-ficolin shRNA (h) Lentiviral Particles: sc-105432-V.

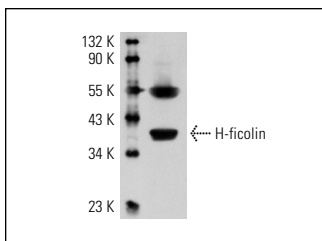
Molecular Weight of H-ficolin: 35 kDa.

Positive Controls: T98G cell lysate: sc-2294, HeLa whole cell lysate: sc-2200 or THP-1 cell lysate: sc-2238.

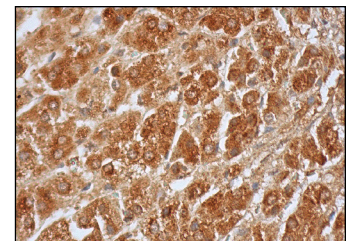
RECOMMENDED SECONDARY REAGENTS

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



H-ficolin (G-15): sc-55202. Western blot analysis of H-ficolin expression in THP-1 whole cell lysate.



H-ficolin (G-15): sc-55202. Immunoperoxidase staining of formalin fixed, paraffin-embedded human adrenal gland tissue showing cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Verma, A., et al. 2012. Human H-ficolin inhibits replication of seasonal and pandemic influenza A viruses. *J. Immunol.* 189: 2478-2487.
2. Ferrin, G., et al. 2014. Identification of candidate biomarkers for hepatocellular carcinoma in plasma of HCV-infected cirrhotic patients by 2-D DIGE. *Liver Int.* 34: 438-446.