

H-ficolin (S-19): sc-55204

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 immunoaffinity subtraction, hydrazide chemistry, and mass spectrometry. *J. Proteome Res.* 4: 2070-2080.
5. Luo, J.H., et al. 2006. Transcriptomic and genomic analysis of human hepatocellular carcinomas and hepatoblastomas. *Hepatology* 44: 1012-1024.
6. Honoré, C., et al. 2007. The innate immune component ficolin-3 (Hakata antigen) mediates the clearance of late apoptotic cells. *Arthritis Rheum.* 56: 1598-1607.
7. Hummelshoj, T., et al. 2008. Comparative study of the human ficolins reveals unique features of ficolin-3 (Hakata antigen). *Mol. Immunol.* 45: 1623-1632.

CHROMOSOMAL LOCATION

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

SOURCE

H-ficolin (S-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of H-ficolin of human origin.

STORAGE

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

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-55204 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

H-ficolin (S-19) 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) 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.

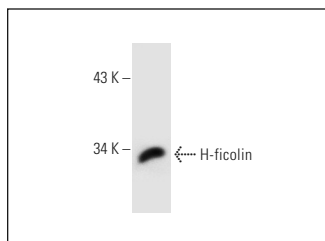
Molecular Weight of H-ficolin: 35 kDa.

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.

DATA



H-ficolin (S-19): sc-55204. Western blot analysis of H-ficolin expression in HeLa whole cell lysate.

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.