

GC-1 (D-20): sc-84274

BACKGROUND

GC-1, also known as OLFM4 (olfactomedin-4) or GW112, is a 510 amino acid protein that is secreted into extracellular space and contains one olfactomedin-like domain. Expressed at high levels in prostate, colon and small intestine, with lower levels in bone marrow and stomach tissue, GC-1 exists as a homomultimer that functions as an anti-apoptotic factor that promotes cell growth and proliferation. Specifically functioning to assist in the S to G₂/M phase transition and to facilitate cell adhesion, GC-1 interacts with Grim19 and plays an important role in the pathogenesis of pancreatic, stomach and colon cancer. The gene encoding GC-1 maps to human chromosome 13, which houses over 400 genes, such as BRCA2 and RB1, and comprises nearly 4% of the human genome.

REFERENCES

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- Liu, W., et al. 2006. The glycoprotein hGC-1 binds to cadherin and lectins. *Exp. Cell Res.* 312: 1785-1797.
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- Liu, W., et al. 2007. Expression of hGC-1 is correlated with differentiation of gastric carcinoma. *Histopathology* 51: 157-165.
- Chin, K.L., et al. 2008. The regulation of OLFM4 expression in myeloid precursor cells relies on NFκB transcription factor. *Br. J. Haematol.* 143: 421-432.
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CHROMOSOMAL LOCATION

Genetic locus: OLFM4 (human) mapping to 13q14.3.

SOURCE

GC-1 (D-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of GC-1 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-84274 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GC-1 (D-20) is recommended for detection of GC-1 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 GC-1 siRNA (h): sc-75113, GC-1 shRNA Plasmid (h): sc-75113-SH and GC-1 shRNA (h) Lentiviral Particles: sc-75113-V.

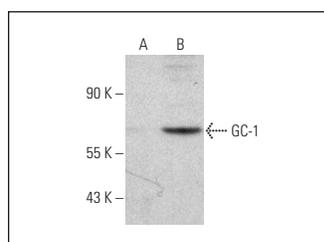
Molecular Weight of GC-1: 54 kDa.

Positive Controls: GC-1 (h): 293T Lysate: sc-372868.

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



GC-1 (D-20): sc-84274. Western blot analysis of GC-1 expression in non-transfected: sc-117752 (A) and human GC-1 transfected: sc-372868 (B) 293T whole cell lysates.

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.

PROTOCOLS

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