



Hemogen (C-20): sc-66232

BACKGROUND

Hemogen (hemopoietic gene protein, erythroid differentiation-associated gene protein) is a 484 amino acid protein encoded by the human gene HEMGN. Hemogen is a nuclear protein that is expressed in hematopoietic precursor cells and can be detected in CD34⁺ and K-562 leukemia cell line. It is also expressed in bone marrow, testis, thymus and thyroid tumors, non-Hodgkin lymphoma, various leukemia cell lines, peripheral blood mononuclear cells (PBMCs) and bone marrow mononuclear cells (BMMCs) of patients with leukemia. Hemogen is downregulated during megakaryocytic differentiation of K-562 cells by 12-O-tetradecanoylphorbol-13-acetate (TPA) (at protein level). It can be upregulated in normal PBMCs by mitogens.

REFERENCES

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7. Yang, L.V., Wan, J., Ge, Y., Fu, Z., Kim, S.Y., Fujiwara, Y., Taub, J.W., Matherly, L.H., Eliason, J. and Li, L. 2006. The GATA site-dependent hemogen promoter is transcriptionally regulated by GATA-1 in hematopoietic and leukemia cells. *Leukemia* 20: 417-425.

STORAGE

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

PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: HEMGN (human) mapping to 9q22.33.

SOURCE

Hemogen (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Hemogen of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-66232 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Hemogen (C-20) is recommended for detection of Hemogen of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 Hemogen siRNA (h): sc-61859, Hemogen shRNA Plasmid (h): sc-61859-SH and Hemogen shRNA (h) Lentiviral Particles: sc-61859-V.

Molecular Weight of Hemogen: 55 kDa.

Positive Controls: K-562 nuclear extract: sc-2130, MEG-01 nuclear extract: sc-2150 or Jurkat nuclear extract: sc-2132.

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) 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.

RESEARCH USE

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