

Hemogen (M-180): sc-68360

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

1. Yang, L.V., et al. 2001. Hemogen is a novel nuclear factor specifically expressed in mouse hematopoietic development and its human homologue EDAG maps to chromosome 9q22, a region containing breakpoints of hematological neoplasms. *Mech. Dev.* 104: 105-111.
2. Lü, J., et al. 2002. Isolation and characterization of EDAG-1, a novel gene related to regulation in hematopoietic system. *Sheng Wu Hua Xue Yu Sheng Wu Wu Li Xue Bao* 33: 641-646.

CHROMOSOMAL LOCATION

Genetic locus: Hemgn (mouse) mapping to 4 B1.

SOURCE

Hemogen (M-180) is a rabbit polyclonal antibody raised against amino acids 181-360 mapping within an internal region of Hemogen of mouse origin.

PRODUCT

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

STORAGE

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

APPLICATIONS

Hemogen (M-180) is recommended for detection of Hemogen of mouse 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 Hemogen siRNA (m): sc-61860, Hemogen shRNA Plasmid (m): sc-61860-SH and Hemogen shRNA (m) Lentiviral Particles: sc-61860-V.

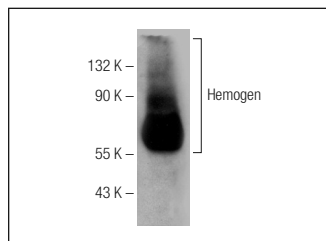
Molecular Weight of Hemogen: 55 kDa.

Positive Controls: mouse lymph node extract: sc-364243.

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



Hemogen (M-180): sc-68360. Western blot analysis of Hemogen expression in mouse lymph node tissue extract.

SELECT PRODUCT CITATIONS

1. Jiang, J., et al. 2010. Hemgn is a direct transcriptional target of HOXB4 and induces expansion of murine myeloid progenitor cells. *Blood* 116: 711-719.
2. Griaud, F., et al. 2012. Bcr/Abl modulates protein phosphorylation associated with the etoposide-induced DNA damage response. *J. Proteomics* 77: 14-26.

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.

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Try **Hemogen (G-2): sc-377438**, our highly recommended monoclonal alternative to Hemogen (M-180).