



# Hemogen (E-20): sc-66234

## 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<sup>+</sup> and the 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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5. Li, C.Y., Zhan, Y.Q., Xu, C.W., Xu, W.X., Wang, S.Y., Lv, J., Zhou, Y., Yue, P.B., Chen, B. and Yang, X.M. 2004. EDAG regulates the proliferation and differentiation of hematopoietic cells and resists cell apoptosis through the activation of nuclear factor  $\kappa$ B. *Cell Death Differ.* 11: 1299-1308.
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## CHROMOSOMAL LOCATION

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

## SOURCE

Hemogen (E-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Hemogen of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-66234 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Hemogen (E-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.

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.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.