GCET2 (E-17): sc-99903



The Power to Question

BACKGROUND

GCET2 (germinal center expressed transcript 2), also known as HGAL or GCAT2, is a 178 amino acid protein that localizes to the cytoplasm and contains two putative SH2 binding sites, as well as a PDZ-interacting domain and an immunoreceptor tyrosine-based activation motif (ITAM). Induced by IL-4, GCET2 is thought to function as a signaling molecule that may be involved in transduction pathways throughout the cell. Additionally, GCET2, which exists as multiple alternatively spliced isoforms, is upregulated in lymphoma cell lines, suggesting a role in carcinogenesis. The gene encoding GCET2 maps to human chromosome 3, which houses over 1,100 genes, including a chemokine receptor (CKR) gene cluster and a variety of human cancer-related gene loci.

REFERENCES

- Christoph, T., et al. 1994. M17: a novel gene expressed in germinal centers. Int. Immunol. 6: 1203-1211.
- Pan, Z., et al. 2003. Two newly characterized germinal center B cell-associated genes, GCET1 and GCET2, have differential expression in normal and neoplastic B cells. Am. J. Pathol. 163: 135-144.
- Lossos, I.S., et al. 2003. HGAL is a novel interleukin-4-inducible gene that strongly predicts survival in diffuse large B cell lymphoma. Blood 101: 433-440.
- 4. Online Mendelian Inheritance in Man, OMIM™. 2003. Johns Hopkins University, Baltimore, MD. MIM Number: 607792. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Natkunam, Y., et al. 2005. Expression of the human germinal center-associated lymphoma (HGAL) protein, a new marker of germinal center B cell derivation. Blood 105: 3979-3986.
- Lu, X., et al. 2005. Distinct IL-4-induced gene expression, proliferation, and intracellular signaling in germinal center B cell-like and activated B cell-like diffuse large-cell lymphomas. Blood 105: 2924-2932.
- 7. Lu, X., et al. 2007. HGAL, a lymphoma prognostic biomarker, interacts with the cytoskeleton and mediates the effects of IL-6 on cell migration. Blood 110: 4268-4277.
- 8. Xie, X., et al. 2008. Expression of HGAL in primary cutaneous large B cell lymphomas: evidence for germinal center derivation of primary cutaneous follicular lymphoma. Mod. Pathol. 21: 653-659.

CHROMOSOMAL LOCATION

Genetic locus: GCET2 (human) mapping to 3q13.2.

SOURCE

GCET2 (E-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of GCET2 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 lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-99903 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GCET2 (E-17) is recommended for detection of GCET2 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); non cross-reactive with GCET1.

Suitable for use as control antibody for GCET2 siRNA (h): sc-78432, GCET2 shRNA Plasmid (h): sc-78432-SH and GCET2 shRNA (h) Lentiviral Particles: sc-78432-V.

Molecular Weight of GCET2: 21 kDa.

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

PROTOCOLS

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

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