

gasdermin C (C-12): sc-87299

BACKGROUND

Gasdermin C (GSDMC), also known as melanoma-derived leucine zipper-containing extranuclear factor (MLZE), is a 508 amino acid member of the gasdermin protein family. Localized to the cytoplasm, gasdermin C is expressed primarily in spleen and trachea. Gasdermin C expression has been found to increase with the metastatic potential of melanoma cells. The gene that encodes gasdermin C maps to human chromosome 8, which encodes about 800 genes. Translocation of portions of chromosome 8 with amplifications of the c-Myc gene are found in some leukemias and lymphomas, and typically associated with a poor prognosis. Portions of chromosome 8 have been linked to schizophrenia and bipolar disorder. Chromosome 8 is also associated with Pfeiffer syndrome, congenital hypothyroidism and Waardenburg syndrome.

REFERENCES

1. Watabe, K., Ito, A., Asada, H., Endo, Y., Kobayashi, T., Nakamoto, K., Itami, S., Takao, S., Shinomura, Y., Aikou, T., Yoshikawa, K., Matsuzawa, Y., Kitamura, Y. and Nojima, H. 2001. Structure, expression and chromosome mapping of MLZE, a novel gene which is preferentially expressed in metastatic melanoma cells. *Jpn. J. Cancer Res.* 92: 140-151.
2. Tamura, M., Tanaka, S., Fujii, T., Aoki, A., Komiyama, H., Ezawa, K., Sumiyama, K., Sagai, T. and Shiroishi, T. 2007. Members of a novel gene family, Gsdm, are expressed exclusively in the epithelium of the skin and gastrointestinal tract in a highly tissue-specific manner. *Genomics* 89: 618-629.
3. Saeki, N., Kim, D.H., Usui, T., Aoyagi, K., Tatsuta, T., Aoki, K., Yanagihara, K., Tamura, M., Mizushima, H., Sakamoto, H., Ogawa, K., Ohki, M., Shiroishi, T., Yoshida, T. and Sasaki, H. 2007. Gasdermin, suppressed frequently in gastric cancer, is a target of LMO1 in TGF β -dependent apoptotic signalling. *Oncogene* 26: 6488-6498.
4. Online Mendelian Inheritance in Man, OMIM™. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 608384. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
5. Saeki, N., Usui, T., Aoyagi, K., Kim, D.H., Sato, M., Mabuchi, T., Yanagihara, K., Ogawa, K., Sakamoto, H., Yoshida, T. and Sasaki, H. 2009. Distinctive expression and function of four GSDM family genes (GSDMA-D) in normal and malignant upper gastrointestinal epithelium. *Genes Chromosomes Cancer* 48: 261-271.
6. Birnbaum, S., Ludwig, K.U., Reutter, H., Herms, S., Steffens, M., Rubini, M., Baluardo, C., Ferrian, M., Almeida de Assis, N., Alblas, M.A., Barth, S., Freudenberg, J., Lauster, C., Schmidt, G., Scheer, M., Braumann, B., et al. 2009. Key susceptibility locus for nonsyndromic cleft lip with or without cleft palate on chromosome 8q24. *Nat. Genet.* 41: 473-477.

CHROMOSOMAL LOCATION

Genetic locus: GSDMC (human) mapping to 8q24.1.

SOURCE

gasdermin C (C-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of gasdermin C 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-87299 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

gasdermin C (C-12) is recommended for detection of gasdermin C 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 gasdermin C siRNA (h): sc-77600, gasdermin C shRNA Plasmid (h): sc-77600-SH and gasdermin C shRNA (h) Lentiviral Particles: sc-77600-V.

Molecular Weight of gasdermin C: 57 kDa.

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) 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.

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.