GSDML (D-15): sc-103540



The Boures to Overtion

BACKGROUND

GSDML (gasdermin-like), also known as GSDMB, PP4052 or PR02521, is a member of the GSDMDC (gasdermin domain-containing) family of proteins. Members of the GSDMDC family are involved in a wide variety of cellular processes, including cell-cycle control, extracellular matrix production, differentiation and apoptosis, and have been associated with the development and progression of cancer. GSDML is a widely expressed protein found in both cancerous and non-cancerous tissues localizing to the cytoplasm, and in secretory vesicles. The gene encoding GSDML is thought to have been generated by a duplication event of the GSDM1 gene which encodes gasdermin. Various isoforms exist for GSDML.

REFERENCES

- 1. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 611221. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- 2. Katoh, M. and Katoh, M. 2004. Evolutionary recombination hotspot around GSDML-GSDM locus is closely linked to the oncogenomic recombination hotspot around the PPP1R1B-ErbB-2-GRB7 amplicon. Int. J. Oncol. 24: 757-763.
- Katoh, M. and Katoh, M. 2004. Identification and characterization of human DFNA5L, mouse Dfna5I, and rat Dfna5I genes in silico. Int. J. Oncol. 25: 765-770.
- Sin, H.S., Huh, J.W., Kim, D.S., Kang, D.W., Min, D.S., Kim, T.H., Ha, H.S., Kim, H.H., Lee, S.Y. and Kim, H.S. 2006. Transcriptional control of the HERV-H LTR element of the GSDML gene in human tissues and cancer cells. Arch. Virol. 151: 1985-1994.
- 5. Sun, Q., Zhang, L.Q. and He, F.C. 2006. Progress of researches on gene function of GSDMDC family. Yi Chuan 28: 596-600.
- Nguyen, S.T., Hasegawa, S., Tsuda, H., Tomioka, H., Ushijima, M., Noda, M., Omura, K. and Miki, Y. 2007. Identification of a predictive gene expression signature of cervical lymph node metastasis in oral squamous cell carcinoma. Cancer Sci. 98: 740-746.
- 7. 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.
- 8. Carl-McGrath, S., Schneider-Stock, R., Ebert, M. and Röcken, C. 2008. Differential expression and localisation of gasdermin-like (GSDML), a novel member of the cancer-associated GSDMDC protein family, in neoplastic and non-neoplastic gastric, hepatic, and colon tissues. Pathology 40: 13-24.

CHROMOSOMAL LOCATION

Genetic locus: GSDMB (human) mapping to 17q12.

SOURCE

GSDML (D-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of GSDML of human origin.

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-103540 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GSDML (D-15) is recommended for detection of GSDML 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 GSDML siRNA (h): sc-93597, GSDML shRNA Plasmid (h): sc-93597-SH and GSDML shRNA (h) Lentiviral Particles: sc-93597-V.

Molecular Weight of GSDML: 45 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

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) 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.



Try **GSDML (3D8): sc-101239**, our highly recommended monoclonal alternative to GSDML (D-15).

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 Fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com