

# GSDML (3D8): sc-101239

## 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. In addition, various isoforms exist for GSDML.

## REFERENCES

1. Online Mendelian Inheritance in Man, OMIM<sup>™</sup>. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 611221. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
2. Katoh, M., et al. 2004. Evolutionary recombination hotspot around GSDML-GSDM locus is closely linked to the oncogenic recombination hotspot around the PPP1R1B-ERBB2-GRB7 amplicon. *Int. J. Oncol.* 24: 757-763.
3. Katoh, M., et al. 2004. Identification and characterization of human DFNA5L, mouse Dfna5l, and rat Dfna5l genes in silico. *Int. J. Oncol.* 25: 765-770.
4. Sin, H.S., et al. 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., et al. 2006. Progress of researches on gene function of GSDMDC family. *Yi Chuan* 28: 596-600.
6. Nguyen, S.T., et al. 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., et al. 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., et al. 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 (3D8) is a mouse monoclonal antibody raised against recombinant GSDML of human origin.

## PRODUCT

Each vial contains 100 µg IgG<sub>2b</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

GSDML (3D8) is recommended for detection of GSDML of human 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)] 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.

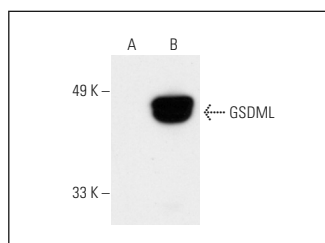
Molecular Weight of GSDML: 45 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or GSDML (h): 293T Lysate: sc-114177.

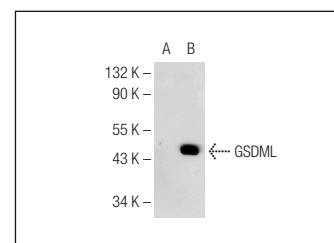
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

## DATA



GSDML (3D8): sc-101239. Western blot analysis of GSDML expression in non-transfected: sc-117752 (A) and human GSDML transfected: sc-114177 (B) 293T whole cell lysates.



GSDML (3D8): sc-101239. Western blot analysis of GSDML expression in non-transfected: sc-117752 (A) and human GSDML transfected: sc-177316 (B) 293T whole cell lysates.

## SELECT PRODUCT CITATIONS

1. Hergueta-Redondo, M., et al. 2014. Gasdermin-B promotes invasion and metastasis in breast cancer cells. *PLoS ONE* 9: e90099.
2. Hansen, J.M., et al. 2021. Pathogenic ubiquitination of GSDMB inhibits NK cell bactericidal functions. *Cell* 184: 3178-3191.e18.

## 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.