# SANTA CRUZ BIOTECHNOLOGY, INC.

# GSDMDC1 (H-11): sc-393581



## BACKGROUND

The gene encoding the 484 amino acid protein GSDMDC1 maps to human chromosome 8, which is made up of nearly 146 million bases and 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. Trisomy 8, also known as Warkany syndrome 2, most often results in early miscarriage but is occasionally seen in a mosaic form in surviving patients who suffer to a varying degree from a number of symptoms including retarded mental and motor development, and certain facial and developmental defects. WRN is a DNA helicase encoded by chromosome 8 and shown defective in those with the early aging disorder Werner syndrome. Chromosome 8 is also associated with Pfeiffer syndrome, congenital hypothyroidism and Waardenburg syndrome.

# REFERENCES

- 1. Wildenauer, D.B. and Schwab, S.G. 1999. Chromosomes 8 and 10 workshop. Am. J. Med. Genet. 88: 239-243.
- 2. Kashino, G., et al. 2001. Preferential expression of an intact WRN gene in Werner syndrome cell lines in which a normal chromosome 8 has been introduced. Biochem. Biophys. Res. Commun. 289: 111-115.

# **CHROMOSOMAL LOCATION**

Genetic locus: GSDMD (human) mapping to 8q24.3; Gsdmd (mouse) mapping to 15 D3.

## SOURCE

GSDMDC1 (H-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 169-188 within an internal region of GSDMDC1 of mouse origin.

#### PRODUCT

Each vial contains 200  $\mu g$   $lgG_{2b}$  kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

GSDMDC1 (H-11) is available conjugated to agarose (sc-393581 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393581 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393581 PE), fluorescein (sc-393581 FITC), Alexa Fluor<sup>®</sup> 488 (sc-393581 AF488), Alexa Fluor<sup>®</sup> 546 (sc-393581 AF546), Alexa Fluor<sup>®</sup> 594 (sc-393581 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-393581 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-393581 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-393581 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

In addition, GSDMDC1 (H-11) is available conjugated to biotin (sc-393581 B), 200  $\mu g/m I,$  for WB, IHC(P) and ELISA.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

# STORAGE

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

GSDMDC1 (H-11) is recommended for detection of GSDMDC1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], 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 GSDMDC1 siRNA (h): sc-77581, GSDMDC1 siRNA (m): sc-145798, GSDMDC1 shRNA Plasmid (h): sc-77581-SH, GSDMDC1 shRNA Plasmid (m): sc-145798-SH, GSDMDC1 shRNA (h) Lentiviral Particles: sc-77581-V and GSDMDC1 shRNA (m) Lentiviral Particles: sc-145798-V.

Molecular Weight of GSDMDC1: 53 kDa.

Positive Controls: RAW 264.7 whole cell lysate: sc-2211, A-10 cell lysate: sc-3806 or RPE-J cell lysate: sc-24771.

# DATA





GSDMDC1 (H-11): sc-393581. Western blot analysis of GSDMDC1 expression in RAW 264.7 (**A**), J774.A1 (**B**), A-10 (**C**) and RPE-J (**D**) whole cell lysates. GSDMDC1 (H-11): sc-393581. Western blot analysis of GSDMDC1 expression in rat spleen tissue extract (A) and WEHI-3 whole cell lysate (B).

## **SELECT PRODUCT CITATIONS**

- Deng, M., et al. 2018. The endotoxin delivery protein HMGB1 mediates caspase-11-dependent lethality in sepsis. Immunity 49: 740-753.
- Tsuchiya, K., et al. 2019. Caspase-1 initiates apoptosis in the absence of gasdermin D. Nat. Commun. 10: 2091.
- 3. Leng, Y., et al. 2020. HMGB1 mediates homocysteine-induced endothelial cells pyroptosis via cathepsin V-dependent pathway. Biochem. Biophys. Res. Commun. 532: 640-646.
- Poh, L., et al. 2021. AIM2 inflammasome mediates hallmark neuropathological alterations and cognitive impairment in a mouse model of vascular dementia. Mol. Psychiatry 26: 4544-4560.
- Xiao, Y., et al. 2021. Relationship between the pyroptosis of fibroblastlike synoviocytes and HMGB1 secretion in knee osteoarthritis. Mol. Med. Rep. 23: 97.

# **RESEARCH USE**

For research use only, not for use in diagnostic procedures.