SANTA CRUZ BIOTECHNOLOGY, INC.

GSDMDC1 (A-7): sc-393656

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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.

CHROMOSOMAL LOCATION

Genetic locus: Gsdmd (mouse) mapping to 15 D3.

SOURCE

GSDMDC1 (A-7) 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 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

GSDMDC1 (A-7) is available conjugated to agarose (sc-393656 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-393656 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393656 PE), fluorescein (sc-393656 FITC), Alexa Fluor® 488 (sc-393656 AF488), Alexa Fluor® 546 (sc-393656 AF546), Alexa Fluor® 594 (sc-393656 AF594) or Alexa Fluor® 647 (sc-393656 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393656 AF680) or Alexa Fluor® 790 (sc-393656 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

GSDMDC1 (A-7) is recommended for detection of GSDMDC1 of mouse and rat origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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 (m): sc-145798, GSDMDC1 shRNA Plasmid (m): sc-145798-SH and GSDMDC1 shRNA (m) Lentiviral Particles: sc-145798-V.

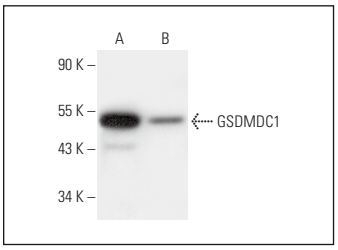
Molecular Weight of GSDMDC1: 53 kDa.

Positive Controls: RAW 264.7 whole cell lysate: sc-2211 or WEHI-3 cell lysate: sc-3815.

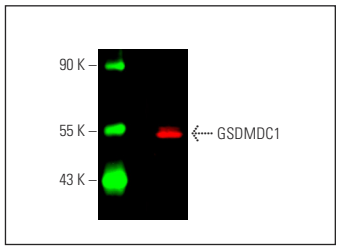
STORAGE

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

DATA



GSDMDC1 (A-7): sc-393656. Western blot analysis of GSDMDC1 expression in RAW 264.7 (**A**) and WEHI-3 (**B**) whole cell lysates.



GSDMDC1 (A-7) Alexa Fluor® 790: sc-393656 AF790. Direct near-infrared western blot analysis of GSDMDC1 expression in RAW 264.7 whole cell lysate. Blocked with UltraCruz® Blocking Reagent: sc-516214. Cruz Marker™ Molecular Weight Standards detected with Cruz Marker™ MW Tag-Alexa Fluor® 680: sc-516730.

SELECT PRODUCT CITATIONS

1. Dick, M.S., et al. 2016. ASC filament formation serves as a signal amplification mechanism for inflammasomes. Nat. Commun. 7: 11929.
2. Cheng, K.T., et al. 2017. Caspase-11-mediated endothelial pyroptosis underlies endotoxemia-induced lung injury. J. Clin. Invest. 127: 4124-4135.
3. Zhang, L., et al. 2018. POH1 deubiquitinates pro-interleukin-1β and restricts inflammasome activity. Nat. Commun. 9: 4225.
4. Chen, R., et al. 2019. AGER-mediated lipid peroxidation drives caspase-11 inflammasome activation in sepsis. Front. Immunol. 10: 1904.
5. Rathkey, J.K., et al. 2020. Human polymorphisms in GSDMD alter the inflammatory response. J. Biol. Chem. 295: 3228-3238.
6. Xu, W., et al. 2021. Apaf-1 pyroptosome senses mitochondrial permeability transition. Cell Metab. 33: 424-436.e10.
7. Zhang, M., et al. 2022. Ageing related thyroid deficiency increases brain-targeted transport of liver-derived ApoE4-laden exosomes leading to cognitive impairment. Cell Death Dis. 13: 406.
8. Komatsu, M., et al. 2023. Aristolochic acid induces an inflammatory response with prostaglandin E2 production and apoptosis in NRK-52E proximal tubular cells. Toxicol. Lett. 378: 39-50.
9. Zhao, Q., et al. 2023. Parabacteroides distasonis ameliorates hepatic fibrosis potentially via modulating intestinal bile acid metabolism and hepatocyte pyroptosis in male mice. Nat. Commun. 14: 1829.
10. Delcroix, V., et al. 2023. Lacrimal gland epithelial cells shape immune responses through the modulation of inflammasomes and lipid metabolism. Int. J. Mol. Sci. 24: 4309.

RESEARCH USE

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