SANTA CRUZ BIOTECHNOLOGY, INC.

MAMSTR (C-8): sc-398698

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

MAMSTR (MEF2-activating motif and SAP domain-containing transcriptional regulator), also known as MASTR (MEF2-activating SAP transcriptional regulatory protein), is a 415 amino acid nuclear protein that functions as a transcriptional coactivator by stimulating MEF-2. Containing one SAP domain, MAMSTR is expressed in spleen, placenta, skeletal muscle and brain, and exists as three alternatively spliced isoforms. The gene encoding MAMSTR maps to human chromosome 19, which consists of over 63 million bases, houses approximately 1,400 genes and is recognized for having the greatest gene density of the human chromosomes. It is the genetic home for a number of immunoglobulin (Ig) superfamily members, including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG family and Fc receptors (FcRs).

REFERENCES

1. Teglund, S., et al. 1994. The pregnancy-specific glycoprotein (PSG) gene cluster on human chromosome 19: fine structure of the 11 PSG genes and identification of 6 new genes forming a third subgroup within the carcinoembryonic antigen (CEA) family. Genomics 23: 669-684.
2. Wang, L., et al. 2000. C-CAM1, a candidate tumor suppressor gene, is abnormally expressed in primary lung cancers. Clin. Cancer Res. 6: 2988-2993.
3. Trowsdale, J., et al. 2001. The genomic context of natural killer receptor extended gene families. Immunol. Rev. 181: 20-38.
4. Leeb, T. and Müller, M. 2004. Comparative human-mouse-rat sequence analysis of the ICAM gene cluster on HSA 19p13.2 and a 185-kb porcine region from SSC 2q. Gene 343: 239-244.
5. Creemers, E.E., et al. 2006. Coactivation of MEF2 by the SAP domain proteins myocardin and MASTR. Mol. Cell 23: 83-96.

CHROMOSOMAL LOCATION

Genetic locus: MAMSTR (human) mapping to 19q13.33; Mamstr (mouse) mapping to 7 B4.

SOURCE

MAMSTR (C-8) is a mouse monoclonal antibody raised against amino acids 299-421 mapping at the C-terminus of MAMSTR of mouse origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

MAMSTR (C-8) is available conjugated to agarose (sc-398698 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-398698 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398698 PE), fluorescein (sc-398698 FITC), Alexa Fluor® 488 (sc-398698 AF488), Alexa Fluor® 546 (sc-398698 AF546), Alexa Fluor® 594 (sc-398698 AF594) or Alexa Fluor® 647 (sc-398698 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398698 AF680) or Alexa Fluor® 790 (sc-398698 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

MAMSTR (C-8) is recommended for detection of MAMSTR of mouse, rat and human 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 MAMSTR siRNA (h): sc-97617, MAMSTR siRNA (m): sc-140365, MAMSTR shRNA Plasmid (h): sc-97617-SH, MAMSTR shRNA Plasmid (m): sc-140365-SH, MAMSTR shRNA (h) Lentiviral Particles: sc-97617-V and MAMSTR shRNA (m) Lentiviral Particles: sc-140365-V.

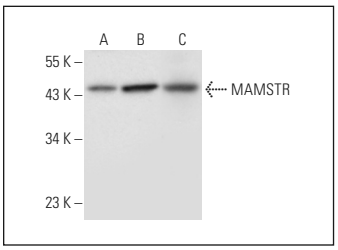
Molecular Weight of MAMSTR isoforms: 45/33/26 kDa.

Positive Controls: A-673 nuclear extract: sc-2128, Neuro-2A whole cell lysate: sc-364185 or mouse liver extract: sc-2256.

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™ Molecular Weight Standards: sc-2035, UltraCruz® 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). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



MAMSTR (C-8): sc-398698. Western blot analysis of MAMSTR expression in A-673 nuclear extract (**A**), Neuro-2A whole cell lysate (**B**) and mouse liver tissue extract (**C**).

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.