

MUM1 (D-11): sc-514332

BACKGROUND

MUM1 (melanoma associated antigen (mutated) 1) is a 710 amino acid protein that becomes phosphorylated by Atm or ATR upon DNA damage and exists as 2 alternatively spliced isoforms. The gene encoding MUM1 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

- Olsen, A., et al. 1994. Gene organization of the pregnancy-specific glycoprotein region on human chromosome 19: assembly and analysis of a 700-kb cosmid contig spanning the region. *Genomics* 23: 659-668.
- 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.
- 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.
- 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.

CHROMOSOMAL LOCATION

Genetic locus: MUM1 (human) mapping to 19p13.3; Mum1 (mouse) mapping to 10 C1.

SOURCE

MUM1 (D-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 72-96 near the N-terminus of MUM1 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

MUM1 (D-11) is available conjugated to agarose (sc-514332 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514332 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514332 PE), fluorescein (sc-514332 FITC), Alexa Fluor® 488 (sc-514332 AF488), Alexa Fluor® 546 (sc-514332 AF546), Alexa Fluor® 594 (sc-514332 AF594) or Alexa Fluor® 647 (sc-514332 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514332 AF680) or Alexa Fluor® 790 (sc-514332 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-514332 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

MUM1 (D-11) is recommended for detection of MUM1 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 MUM1 siRNA (h): sc-97721, MUM1 siRNA (m): sc-149709, MUM1 shRNA Plasmid (h): sc-97721-SH, MUM1 shRNA Plasmid (m): sc-149709-SH, MUM1 shRNA (h) Lentiviral Particles: sc-97721-V and MUM1 shRNA (m) Lentiviral Particles: sc-149709-V.

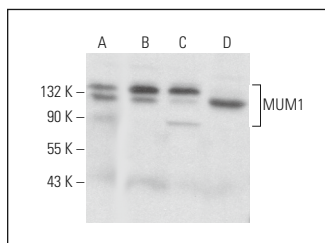
Molecular Weight of MUM1: 79 kDa.

Positive Controls: MUM1 (m): 293T Lysate: sc-121866, CCRF-CEM cell lysate: sc-2225 or Jurkat whole cell lysate: sc-2204.

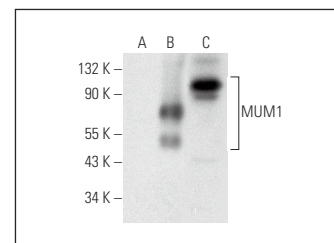
RECOMMENDED SUPPORT REAGENTS

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



MUM1 (D-11): sc-514332. Western blot analysis of MUM1 expression in Jurkat (A), CCRF-CEM (B), IMR-32 (C) and KNRK (D) whole cell lysates.



MUM1 (D-11): sc-514332. Western blot analysis of MUM1 expression in non-transfected 293T: sc-117752 (A), mouse MUM1 transfected 293T: sc-121866 (B) and Jurkat (C) whole cell lysates.

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.

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