

MUM1 (C-13): sc-139009

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 two 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

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- 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 carcino-embryonic 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., et al. 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.
- Matsuoka, S., et al. 2007. ATM and ATR substrate analysis reveals extensive protein networks responsive to DNA damage. *Science* 316: 1160-1166.
- Barrow, A.D., et al. 2008. The extended human leukocyte receptor complex: diverse ways of modulating immune responses. *Immunol. Rev.* 224: 98-123.

CHROMOSOMAL LOCATION

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

SOURCE

MUM1 (C-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of MUM1 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-139009 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

MUM1 (C-13) is recommended for detection of MUM1 of mouse, rat and 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)], 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); non cross-reactive with MUM1L1.

MUM1 (C-13) is also recommended for detection of MUM1 in additional species, including equine, canine, bovine and porcine.

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.

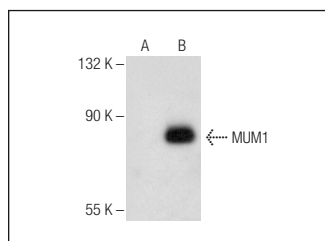
Molecular Weight of MUM1: 79 kDa.

Positive Controls: MUM1 (m): 293T Lysate: sc-121866.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



MUM1 (C-13): sc-139009. Western blot analysis of MUM1 expression in non-transfected: sc-117752 (A) and mouse MUM1 transfected: sc-121866 (B) 293T whole cell lysates.

RESEARCH USE

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

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Try **MUM1 (D-11): sc-514332**, our highly recommended monoclonal alternative to MUM1 (C-13).