

MMD2 (V-16): sc-243497

BACKGROUND

MMD (monocyte to macrophage differentiation-associated), also known as PAQR11 (progesterin and adipoQ receptor family member 11), is a 238 amino acid multi-pass endosomal membrane protein. A member of the ADIPOR family, MMD is expressed almost ubiquitously with high expression in mature macrophages. The gene encoding MMD maps to human chromosome 17, which comprises over 2.5% of the human genome and encodes over 1,200 genes. Two key tumor suppressor genes are associated with chromosome 17, namely, p53 and BRCA1. Tumor suppressor p53 is necessary for maintenance of cellular genetic integrity by moderating cell fate through DNA repair versus cell death. Malfunction or loss of p53 expression is associated with malignant cell growth and Li-Fraumeni syndrome. Like p53, BRCA1 is directly involved in DNA repair, though specifically it is recognized as a genetic determinant of early onset breast cancer and predisposition to cancers of the ovary, colon, prostate gland and fallopian tubes.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: MMD2 (human) mapping to 7p22.1; Mmd2 (mouse) mapping to 5 G2.

STORAGE

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

SOURCE

MMD2 (V-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an N-terminal cytoplasmic domain of MMD2 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-243497 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MMD2 (V-16) is recommended for detection of MMD2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 MMD.

MMD2 (V-16) is also recommended for detection of MMD2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for MMD2 siRNA (h): sc-89597, MMD2 siRNA (m): sc-149477, MMD2 shRNA Plasmid (h): sc-89597-SH, MMD2 shRNA Plasmid (m): sc-149477-SH, MMD2 shRNA (h) Lentiviral Particles: sc-89597-V and MMD2 shRNA (m) Lentiviral Particles: sc-149477-V.

Molecular Weight of MMD2: 29 kDa.

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) 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.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.