

MMP-27 (Y-14): sc-109550

BACKGROUND

Matrix metalloproteinases (MMPs) are a family of proteins that are involved in the breakdown of the extracellular matrix during normal cellular events, including reproduction, tissue remodeling and embryonic development. MMPs are crucial in tumor invasion and building of metastatic formations because of their ability to degrade extracellular matrix proteins such as Fibronectin, laminin, gelatins and/or collagen. MMP-27 (matrix metalloproteinase 27) is a 513 amino acid secreted protein that is expressed in B cells. Belonging to the peptidase M10A family, MMP-27 contains four hemopexin-like domains, which is suggested to be involved in substrate recognition. MMP-27, along with other MMP family members, is associated with breast cancer development and tumor progression.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: MMP27 (human) mapping to 11q22.2; Mmp27 (mouse) mapping to 9 A1.

SOURCE

MMP-27 (Y-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MMP-27 of mouse 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-109550 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MMP-27 (Y-14) is recommended for detection of MMP-27 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 other MMP family members.

MMP-27 (Y-14) is also recommended for detection of MMP-27 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for MMP-27 siRNA (h): sc-96557, MMP-27 siRNA (m): sc-149481, MMP-27 shRNA Plasmid (h): sc-96557-SH, MMP-27 shRNA Plasmid (m): sc-149481-SH, MMP-27 shRNA (h) Lentiviral Particles: sc-96557-V and MMP-27 shRNA (m) Lentiviral Particles: sc-149481-V.

Molecular Weight of MMP-27: 59 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.

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.

PROTOCOLS

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