SANTA CRUZ BIOTECHNOLOGY, INC.

RHAMM (E-19): sc-16170

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Hyaluronic acid (HA) is a nonsulfated glycosaminoglycan that regulates cell adhesion and migration. HA effects are mediated through two receptors, CD44 (also designated HCAM) and the receptor of hyaluronic acid mediated motility (RHAMM). RHAMM, also designated intracellular hyaluronic acid binding protein (IHABP) and CD168, is a matrix receptor, which is linked to the plasma membrane by a GPI anchor and regulates cell motility. RHAMM expression is upregulated in malignant lymphoid tissues and is subsequently implicated in tumor progression and metastasis formation, as well as signal transduction. Although still unclear, RHAMM is thought to exist as several isoforms ranging in size. A variant isoform, designated v4, is a protein that, when over-expressed, is thought to be the cause of transformation and metastasis formation in fibroblasts.

CHROMOSOMAL LOCATION

Genetic locus: HMMR (human) mapping to 5q34; Hmmr (mouse) mapping to 11 A5.

SOURCE

RHAMM (E-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of RHAMM 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-16170 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

RHAMM (E-19) is recommended for detection of RHAMM isoforms A and B 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).

RHAMM (E-19) is also recommended for detection of RHAMM isoforms A and B in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for RHAMM siRNA (h): sc-40181, RHAMM siRNA (m): sc-40182, RHAMM shRNA Plasmid (h): sc-40181-SH, RHAMM shRNA Plasmid (m): sc-40182-SH, RHAMM shRNA (h) Lentiviral Particles: sc-40181-V and RHAMM shRNA (m) Lentiviral Particles: sc-40182-V.

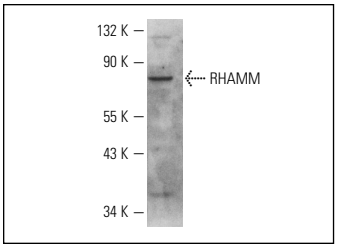
Molecular Weight of RHAMM: 85-90 kDa.

Positive Controls: mouse brain tissue extract: sc-2253.

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



RHAMM (E-19): sc-16170. Western blot analysis of RHAMM expression in mouse brain tissue extract.

SELECT PRODUCT CITATIONS

1. Goueffic, Y., et al. 2006. Hyaluronan induces vascular smooth muscle cell migration through RHAMM-mediated PI3K-dependent Rac activation. Cardiovasc. Res. 72: 339-348.
2. Lin, S.L., et al. 2008. Androgen receptor regulates CD168 expression and signaling in prostate cancer. Carcinogenesis 29: 282-290.
3. Gust, K.M., et al. 2009. RHAMM (CD168) is overexpressed at the protein level and may constitute an immunogenic antigen in advanced prostate cancer disease. Neoplasia 11: 956-963.
4. Kouvidi, K., et al. 2011. Role of receptor for hyaluronic acid-mediated motility (RHAMM) in low molecular weight hyaluronan (LMWHA)-mediated fibrosarcoma cell adhesion. J. Biol. Chem. 286: 38509-38520.
5. Garcia-Posadas, L., et al. 2012. Hyaluronan receptors in the human ocular surface: a descriptive and comparative study of RHAMM and CD44 in tissues, cell lines and freshly collected samples. Histochem. Cell Biol. 137: 165-176.

RESEARCH USE

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