

RHAMM (H-90): sc-25488

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 fibroblast.

REFERENCES

1. Hardwick, C., et al. 1992. Molecular cloning of a novel hyaluronan receptor that mediates tumor cell motility. *J. Cell Biol.* 117: 1343-1350.
2. Turley, E.A., et al. 1993. Expression and function of a receptor for hyaluran-mediated motility on normal and malignant B lymphocytes. *Blood* 81: 446-453.

CHROMOSOMAL LOCATION

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

SOURCE

RHAMM (H-90) is a rabbit polyclonal antibody raised against amino acids 1-90 mapping at the N-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.

APPLICATIONS

RHAMM (H-90) is recommended for detection of RHAMM 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 (H-90) is also recommended for detection of RHAMM 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.

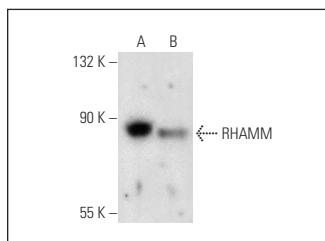
Molecular Weight of RHAMM: 85-90 kDa.

Positive Controls: MDA-MB-435S whole cell lysate: sc-364184, HeLa whole cell lysate: sc-2200 or mouse brain extract: sc-2253.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



RHAMM (H-90): sc-25488. Western blot analysis of RHAMM expression in MDA-MB-435S (A) and HeLa (B) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Schmitt, M., et al. 2006. Chronic myeloid leukemia cells express tumor-associated antigens eliciting specific CD8⁺ T cell responses and are lacking costimulatory molecules. *Exp. Hematol.* 34: 1709-1719.
2. Munoz-Pinto, D.J., et al. 2009. Probing vocal fold fibroblast response to hyaluronan in 3D contexts. *Biotechnol. Bioeng.* 104: 821-831.
3. Silverman-Gavrila, R., et al. 2011. Rear polarization of the microtubule-organizing center in neointimal smooth muscle cells depends on PKC α , ARPC5, and RHAMM. *Am. J. Pathol.* 178: 895-910.
4. Jong, A., et al. 2012. Hyaluronic acid receptor CD44 deficiency is associated with decreased *Cryptococcus neoformans* brain infection. *J. Biol. Chem.* 287: 15298-15306.

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.


 MONOS
Satisfaction
Guaranteed

Try **RHAMM (H-8): sc-515221** or **RHAMM (C-9): sc-515222**, our highly recommended monoclonal alternatives to RHAMM (H-90).