

RHAMM Antibody

Catalog # ASC11285

Specification

RHAMM Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes WB, IHC, IF O75330 NP_036617, 217272802 Human, Mouse, Rat Rabbit Polyclonal IgG RHAMM antibody can be used for detection of RHAMM by Western blot at 1 μg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 μg/mL. For immunofluorescence start at 5 μg/mL.

RHAMM Antibody - Additional Information

Gene ID Target/Specificity HMMR;

Reconstitution & Storage

RHAMM antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

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Precautions

RHAMM Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

RHAMM Antibody - Protein Information

Name HMMR

Synonyms IHABP, RHAMM

Function

Receptor for hyaluronic acid (HA) (By similarity). Involved in cell motility (By similarity). When hyaluronan binds to HMMR, the phosphorylation of a number of proteins, including PTK2/FAK1 occurs. May also be involved in cellular transformation and metastasis formation, and in regulating extracellular-regulated kinase (ERK) activity. May act as a regulator of adipogenisis (By similarity).

Cellular Location

Cell surface {ECO:0000250|UniProtKB:Q00547}. Cytoplasm {ECO:0000250|UniProtKB:Q00547}. Cytoplasm, cytoskeleton, spindle {ECO:0000250|UniProtKB:Q00547}



Tissue Location

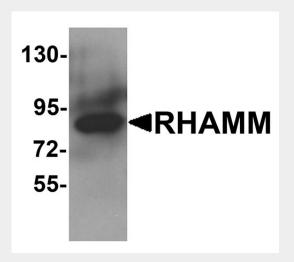
Expressed in testis (PubMed:22965910). Expressed in the breast (PubMed:8890751).

RHAMM Antibody - Protocols

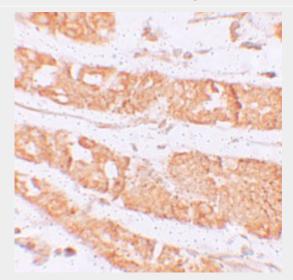
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

RHAMM Antibody - Images

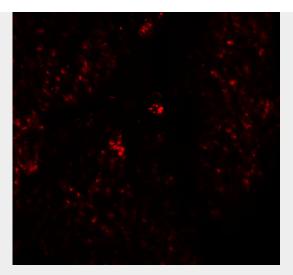


Western blot analysis of RHAMM in rat stomach tissue lysate with RHAMM antibody at 1 µg/mL.



Immunohistochemistry of RHAMM in human stomach tissue with RHAMM antibody at 2.5 µg/mL.





Immunofluorescence of RHAMM in human stomach tissue with RHAM antibody at 20 µg/mL.

RHAMM Antibody - Background

RHAMM Antibody: The hyaluronan-mediated motility receptor, also known as RHAMM, was initially identified as a soluble protein that could be released by sub-confluent migrating cells, promoting cell motility and invasion via interactions with hyaluronan (HA) and the cell surface. While RHAMM is normally poorly expressed in most normal tissues and is not required for embryonic development or normal cell homeostasis functions, its expression is increased during wound repair in response to hypoxia and fibrogenic factors. However, its overexpression is transforming in multiple types of cancers and is required for maintaining RAS transformation. RHAMM associates with BRCA1 and BARD1, attenuating the mitotic-spindle-promoting activity of RHAMM, which may contribute to tumor progression by promoting genomic instability.

RHAMM Antibody - References

Hardwick C, Hoare K, Owens R, et al. Molecular cloning of a novel hyaluronan receptor that promotes tumor cell motility. J. Cell Biol. 1992; 117:1343-50.

Samuel SK, Hurta RA, Spearman MA, et al. TGF-beta 1 stimulation of cell locomotion utilizes the hyaluronan receptor RHAMM and hyaluronan. J. Cell Biol. 1993; 123:749-58.

Hall CL, Yang B, Yang X, et al. Overexpression of the hyaluronan receptor RHAMM is transforming and is also required for H-ras transformation. Cell 1995; 82:19-26.

Maxwell CA, McCarthy J, and Turley E. Cell-surface and mitotic-spindle RHAMM: moonlighting or dual oncogenic functions? J. Cell Sci. 2008; 121:925-32.