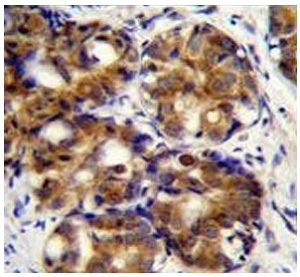
CD168 Antibody / HMMR (F54611)

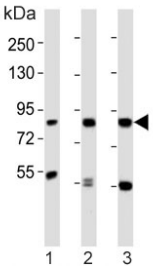
Catalog No.	Formulation	Size
F54611-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F54611-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

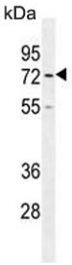
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity purified
UniProt	O75330
Localization	Cell surface, cytoplasmic
Applications	Western Blot : 1:500-1:2000 Flow Cytometry : 1:25 (million cells) Immunohistochemistry (FFPE) : 1:25
Limitations	This CD168 antibody is available for research use only.



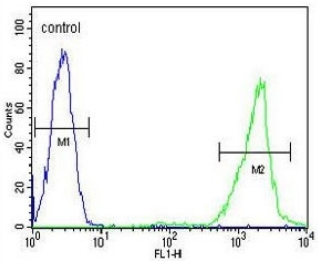
IHC testing of FFPE human breast carcinoma tissue with CD168 antibody. HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



Western blot testing of human 1) K562, 2) LNCaP and 3) HL60 cell lysate with CD168 antibody. Expected molecular weight ~72 kDa (cell surface form) and 85-95 kDa (intracellular form).



Western blot testing of human Ramos cell lysate with CD168 antibody. Expected molecular weight ~72 kDa (cell surface form) and 85-95 kDa (intracellular form).



Flow cytometry testing of fixed and permeabilized human Ramos cells with CD168 antibody; Blue=isotype control, Green= CD168 antibody.

Description

CD168 antibody targets Hyaluronan mediated motility receptor, encoded by the HMMR gene. CD168, also known as RHAMM, is a multifunctional protein that localizes to the cytoplasm, nucleus, and cell surface depending on cellular context. It binds hyaluronan and participates in signaling pathways that regulate cell motility, proliferation, and cytoskeletal organization. CD168 is expressed in a wide range of cell types and is dynamically regulated during cell cycle progression and tissue remodeling.

Functionally, CD168 plays a key role in linking extracellular matrix interactions with intracellular signaling. Through its association with hyaluronan and cytoskeletal components such as microtubules and actin filaments, CD168 influences cell migration and mitotic spindle organization. It also interacts with signaling molecules involved in MAPK and ERK pathways, positioning CD168 as an important mediator of growth factor driven responses. A CD168 antibody supports studies focused on cell movement, division, and matrix driven signaling mechanisms.

CD168 has attracted particular interest in cancer biology. Elevated HMMR expression has been reported in multiple tumor types and is associated with increased invasiveness, altered cell polarity, and enhanced proliferative capacity. Its expression is often enriched in rapidly dividing cells, reflecting its involvement in mitosis and cytoskeletal dynamics. CD168 is therefore frequently studied as a biomarker of tumor progression and as a contributor to aberrant cell motility in malignancy.

At the molecular level, Hyaluronan mediated motility receptor lacks a classical transmembrane domain, and its cellular localization is regulated by protein interactions and post-translational mechanisms rather than fixed membrane anchoring. Different intracellular pools of CD168 may support distinct biological functions, ranging from mitotic control to extracellular matrix signaling. CD168 antibody reagents are useful for investigating these context dependent roles in normal physiology and disease, with NSJ Bioreagents providing research use antibodies to support these studies.

Application Notes

The stated application concentrations are suggested starting points. Titration of the CD168 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 668-697 from the human protein was used as the immunogen for the CD168 antibody.

Storage

Aliquot the CD168 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.