

# Product datasheet

info@arigobio.com

ARG59520 anti-CD44 antibody

Package: 50 μl Store at: -20°C

# **Summary**

Product Description Rabbit Polyclonal antibody recognizes CD44

Tested Reactivity Hu, Ms, Rat

Tested Application ICC/IF, IHC-P, WB

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name CD44

Species Human

Immunogen Recombinant protein of Human CD44.

Conjugation Un-conjugated

Alternate Names MDU2; MDU3; GP90 lymphocyte homing/adhesion receptor; Hermes antigen; Extracellular matrix

receptor III; PGP-I; Epican; CDW44; Phagocytic glycoprotein 1; Pgp1; HUTCH-I; MC56; Hyaluronate receptor; CD antigen CD44; Heparan sulfate proteoglycan; CD44 antigen; LHR; IN; HCELL; Phagocytic

glycoprotein I; PGP-1; CSPG8; MIC4; ECMR-III; CDw44

# **Application Instructions**

Application table	Application	Dilution
	ICC/IF	1:50 - 1:200
	IHC-P	1:50 - 1:200
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Mouse spleen	
Observed Size	82 kDa	

## **Properties**

Form Liquid

Purification Affinity purified.

Buffer PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.

Preservative 0.02% Sodium azide

Stabilizer 50% Glycerol

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw

For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Gene Symbol

**CD44** 

Gene Full Name

CD44 molecule (Indian blood group)

Background

The protein encoded by this gene is a cell-surface glycoprotein involved in cell-cell interactions, cell adhesion and migration. It is a receptor for hyaluronic acid (HA) and can also interact with other ligands, such as osteopontin, collagens, and matrix metalloproteinases (MMPs). This protein participates in a wide variety of cellular functions including lymphocyte activation, recirculation and homing, hematopoiesis, and tumor metastasis. Transcripts for this gene undergo complex alternative splicing that results in many functionally distinct isoforms, however, the full length nature of some of these variants has not been determined. Alternative splicing is the basis for the structural and functional diversity of this protein, and may be related to tumor metastasis. [provided by RefSeq, Jul 2008]

**Function** 

Receptor for hyaluronic acid (HA). Mediates cell-cell and cell-matrix interactions through its affinity for HA, and possibly also through its affinity for other ligands such as osteopontin, collagens, and matrix metalloproteinases (MMPs). Adhesion with HA plays an important role in cell migration, tumor growth and progression. In cancer cells, may play an important role in invadopodia formation. Also involved in lymphocyte activation, recirculation and homing, and in hematopoiesis. Altered expression or dysfunction causes numerous pathogenic phenotypes. Great protein heterogeneity due to numerous alternative splicing and post-translational modification events. [UniProt]

Research Area

Cancer antibody; Developmental Biology antibody; Immune System antibody; Chondrogenesis Study antibody

Calculated Mw

82 kDa

PTM

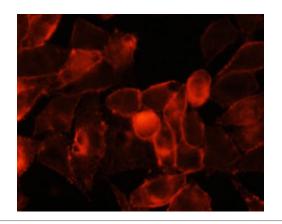
Proteolytically cleaved in the extracellular matrix by specific proteinases (possibly MMPs) in several cell lines and tumors.

N- and O-glycosylated. O-glycosylation contains more-or-less-sulfated chondroitin sulfate glycans, whose number may affect the accessibility of specific proteinases to their cleavage site(s). It is uncertain if O-glycosylation occurs on Thr-637 or Thr-638.

Phosphorylated; activation of PKC results in the dephosphorylation of Ser-706 (constitutive phosphorylation site), and the phosphorylation of Ser-672. [UniProt]

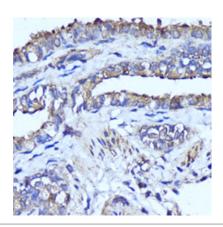
Cellular Localization

Cell membrane; Single-pass type I membrane protein. Cell projection, microvillus. Note=Colocalizes with actin in membrane protrusions at wounding edges. Co-localizes with RDX, EZR and MSN in microvilli. [UniProt]



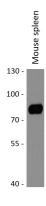
# ARG59520 anti-CD44 antibody ICC/IF image

Immunofluorescence: HeLa cells stained with ARG59520 anti-CD44 antibody at 1:100 dilution.



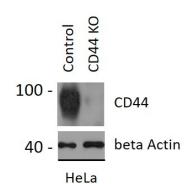
#### ARG59520 anti-CD44 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat bronchus stained with ARG59520 anti-CD44 antibody at 1:100 dilution.



# ARG59520 anti-CD44 antibody WB image

Western blot: 25  $\mu g$  of Mouse spleen lysate stained with ARG59520 anti-CD44 antibody at 1:1000 dilution.



### ARG59520 anti-CD44 antibody WB image

Western blot:  $25~\mu g$  of extracts from normal (control) and CD44 knockout (KO) HeLa cells, using ARG59520 anti-CD44 antibody at 1:1000 dilution.