

## ARG23398 anti-CD44 antibody [YKIX337.8.7]

Package: 100 µg  
Store at: -20°C

### Summary

Product Description	Rat Monoclonal antibody [YKIX337.8.7] recognizes CD44 Rat anti Dog CD44 antibody, clone YKIX337.8.7 recognises canine CD44, also known as H-CAM, a single-pass type 1 membrane of approximately 90kDa expressed by most leucocytes and epithelial cells. CD44 expression is markedly increased upon cell activation (Aldinger et al. 2000).CD44 is involved in cell-cell, cell adhesion and cell migration and is the principal cellular receptor for hyaluronate via it's LINK domain, additionally CD44 also interacts with other ligands including collagens and metalloproteinases. Studies have demonstrated that altered CD44 expression is detected in a many forms of invasive and metasic cancers, CD44 expression has been observed on canine mammary and melanocytic tumours (Serra et al. 2004).
Tested Reactivity	Dog
Tested Application	FACS, IHC-Fr
Host	Rat
Clonality	Monoclonal
Clone	YKIX337.8.7
Isotype	IgG2a
Target Name	CD44
Species	Dog
Immunogen	Concanavilin A activated Canine T cells.
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
	FACS	1:10 - 1:20
	IHC-Fr	Assay-dependent

Application Note  
FACS: Use 10 µl of the suggested working dilution to label 10<sup>6</sup> cells in 100 µl.  
\* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

### Properties

Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS and 0.09% Sodium azide.

Preservative	0.09% Sodium azide
Concentration	1 mg/ml
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 or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

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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	<p>Proteolytically cleaved in the extracellular matrix by specific proteinases (possibly MMPs) in several cell lines and tumors.</p> <p>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.</p> <p>Phosphorylated; activation of PKC results in the dephosphorylation of Ser-706 (constitutive phosphorylation site), and the phosphorylation of Ser-672. [UniProt]</p>