

**Summary** 

## ARG20797 anti-CD44 antibody [KM201] (PE)

Package: 50 μg Store at: 4°C

#### **Product Description** PE-conjugated Rat Monoclonal antibody [KM201] recognizes CD44 **Tested Reactivity** Ms **Tested Application** BL, FACS, ICC/IF, IHC-Fr, IHC-P, WB Specificity Mouse CD44 (all isoforms). The clone KM201 reacts with an epitope very close to the hyaluronate binding domain on CD44. KM201 can inhibit hyaluronate-dependent cell aggregation, prevent lymphohemopoiesis in both Dexter and Whitlock-Witte cultures, prevent the earliest intrathymic precursors from homing to the thymus, and costimulate the activation of freshly purified splenic CD4+ T cells. Host Rat Monoclonal Clonality Clone KM201 lgG1, kappa Isotype Target Name CD44 **Species** Mouse Immunogen (C57BL/6 x DBA/2)F1 mouse bone marrow-derived stromal clone BMS2 Conjugation ΡE **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**

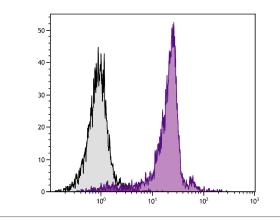
Application table	Application	Dilution
	BL	Assay-dependent
	FACS	< 0.2 µg/10^6 cells
	ICC/IF	Assay-dependent
	IHC-Fr	Assay-dependent
	IHC-P	Assay-dependent
	WB	Assay-dependent
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

#### Properties

Buffer	PBS, 0.1% Sodium azide and Sucrose.	
Preservative	0.1% Sodium azide	
Stabilizer	Sucrose	
Concentration	0.1 mg/ml	
Storage instruction	Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. 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

Database links	GenelD: 12505 Mouse
	Swiss-port # P15379 Mouse
Gene Symbol	CD44
Gene Full Name	CD44 antigen
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
ΡΤΜ	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.



#### ARG20797 anti-CD44 antibody [KM201] (PE) FACS image

Flow Cytometry: BALB/c Mouse bone marrow cells stained with ARG20797 anti-CD44 antibody [KM201] (PE).