

ARG20800 anti-CD44 antibody [KM201] (low endotoxin)

Package: 100 µg
Store at: -20°C

Summary

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| Product Description | Azide free and low endotoxin Rat Monoclonal antibody [KM201] recognizes CD44 |
| Tested Reactivity | Ms |
| Tested Application | BL, FACS, ICC/IF, IHC-Fr, IHC-P, IP, 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 lympho-hemopoiesis 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 |
| Clonality | Monoclonal |
| Clone | KM201 |
| Isotype | IgG1, kappa |
| Target Name | CD44 |
| Species | Mouse |
| Immunogen | (C57BL/6 x DBA/2)F1 mouse bone marrow-derived stromal clone BMS2 |
| 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 |
|-------------------|--|-----------------|
| | BL | Assay-dependent |
| | FACS | Assay-dependent |
| | ICC/IF | Assay-dependent |
| | IHC-Fr | Assay-dependent |
| | IHC-P | Assay-dependent |
| | IP | 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

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|---------------------|---|
| Form | Liquid |
| Purification Note | Low endotoxin |
| Buffer | PBS |
| Concentration | 0.5 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. 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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|----------------|---|
| Database links | GeneID: 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 |
| 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.</p> |