ARG23082
anti-CD44 antibody [OX-50] (PE)

Package: 50 tests
Store at: 4°C

Summary

Product Description	PE-conjugated Mouse Monoclonal antibody [OX-50] recognizes CD44 Mouse anti Rat CD44 antibody, clone OX-50 recognizes the rat CD44 cell surface antigen, also known as Extracellular matrix receptor III, P90 lymphocyte homing/adhesion receptor, HUTCH-I, Hermes antigen, Hyaluronate receptor, Phagocytic glycoprotein 1, PGP-1 or Phagocytic glycoprotein I.CD44 is a 482 amino acid ~85 kDa single pass type I transmembrane glycoprotein, expressed by T cells, B cells, macrophages and thymocytes, with expression being increased following activation.
Tested Reactivity	Rat
Tested Application	FACS
Host	Mouse
Clonality	Monoclonal
Clone	OX-50
Isotype	IgG1
Target Name	CD44
Species	Rat
Immunogen	Rat T cell blasts.
Conjugation	PE
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	Neat

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

Properties

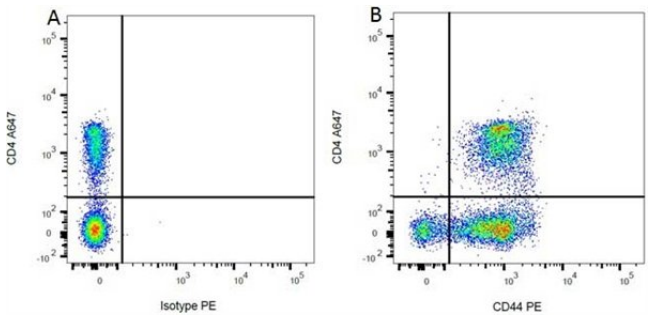
Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS, 0.09% Sodium azide, 1% BSA and 5% Sucrose
Preservative	0.09% Sodium azide
Stabilizer	1% BSA and 5% Sucrose

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

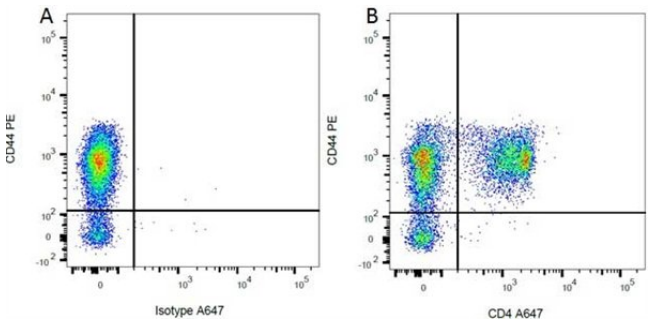
Gene Symbol	Cd44
Gene Full Name	CD44 molecule (Indian blood group)
Background	The protein encoded by this gene is a cell-surface glycoprotein involved in cell-cell interactions, cell adhesion and migration. It is a receptor for hyaluronic acid (HA) and can also interact with other ligands, such as osteopontin, 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.

Images



ARG23082 anti-CD44 antibody [OX-50] (PE) FACS image

Flow Cytometry: Figure A. A647 conjugated mouse anti rat CD4 and PE-conjugated mouse IgG2a isotype control. Figure B. A647 conjugated mouse anti rat CD4 and ARG23082 anti-CD44 antibody [OX-50] (PE). All experiments performed on red cell lysed rat blood gated on mononuclear cells.



ARG23082 anti-CD44 antibody [OX-50] (PE) FACS image

Flow Cytometry: Figure A. ARG23082 anti-CD44 antibody [OX-50] (PE) and A647 conjugated mouse IgG2a isotype control. Figure B. ARG23082 anti-CD44 antibody [OX-50] (PE) and PE-conjugated mouse anti rat CD4. All experiments performed on red cell lysed rat blood gated on mononuclear cells.