

Mouse CD103 Antibody | anti-CD103 antibody

Anti-Hu CD103 PE-Cy7

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA129380	Mouse	Human, Non-human primates	Flow Cytometry, Functional Assay

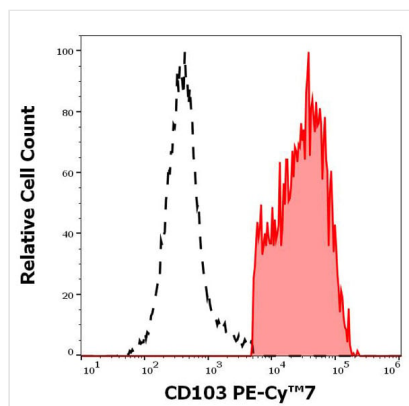
PRODUCT SYNONYMS

CD103; Anti-Hu CD103 PE-Cy7; integrin subunit alpha E; Integrin alpha E; ITGAE; anti-CD103 antibody

PRODUCT SPECIFICATIONS

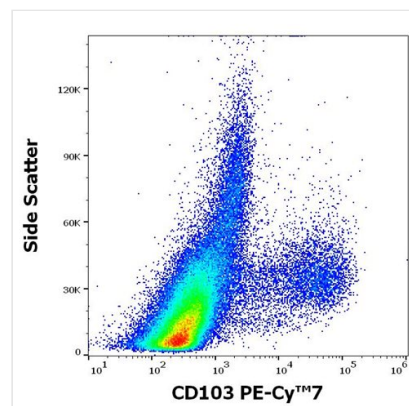
Host	Mouse
Reactivity	Human, Non-human primates
Isotype	Mouse IgG1 kappa
Clone Number	Ber-ACT8
Specificity	The mouse monoclonal antibody Ber-ACT8 recognizes an extracellular epitope of CD103 (alpha E integrin), a type I transmembrane glycoprotein primarily found on intestinal intraepithelial lymphocytes.
Purity/Purification	Purified antibody is conjugated with activated tandem dye of R-phycoerythrin-cyanine 7 (PE-Cy7) under optimum conditions and unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.
Form/Format	Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Applicable Applications for anti-CD103 antibody	FCM/FACS (Flow Cytometry)
Immunogen	HTLV-1 induced human T cell line MAPS16
Conjugation	PE-Cy7
Preparation and Storage	Store at 2-8 degree C. Protect from prolonged exposure to light. Do not freeze.

IMAGES



FCM/FACS (Flow Cytometry)

Separation of human CD103 positive cells (red-filled) from CD103 negative cells (black-dashed) in flow cytometry analysis (surface staining) of PMA stimulated human peripheral blood mononuclear cells stained using anti-human CD103 (Ber-ACT8) PE-Cy7 antibody (concentration in sample 0.33ug/ml).



FCM/FACS (Flow Cytometry)

Flow cytometry surface staining pattern of PMA stimulated human peripheral blood mononuclear cells stained using anti-human CD103 (Ber-ACT8) PE-Cy7 antibody (concentration in sample 0.33ug/ml).

ADDITIONAL INFORMATION

Related Product Information for anti-CD103 antibody	CD103/integrin alphaE is an integrin subunit that is expressed on intraepithelial lymphocytes, epithelial dendritic cells, lamina propria-derived dendritic cells, a subpopulation of lamina propria T cells, a small subset of peripheral lymphocytes, namely T reg cells, and on activated and TGF-beta stimulated lymphocytes. CD103 is in mature form cleaved into two disulfide-linked chains (C-terminal 150 kDa chain and N-terminal 25 kDa chain). It heterodimerizes with integrin beta7 subunit to form alphaE/beta7 integrin (mucosal lymphocyte 1 antigen), which through binding E-cadherin mediates homing of lymphocytes to the intestinal epithelium, and, in addition to the role in adhesion, may serve as an accessory molecule for intraepithelial lymphocyte activation.
References	*Poles MA, Barsoum S, Yu W, Yu J, Sun P, Daly J, He T, Mehandru S, Talal A, Markowitz M, Hurley A, Ho D, Zhang L: Human immunodeficiency virus type 1 induces persistent changes in mucosal and blood gammadelta T cells despite suppressive therapy. J Virol. 2003 Oct;77(19):10456-67., URL: http://www.ncbi.nlm.nih.gov/pubmed/12970431 ,*Jaensson E, Uronen-Hansson H, Pabst O, Eksteen B, Tian J, Coombes JL, Berg PL, Davidsson T, Powrie F, Johansson-Lindbom B, Agace WW: Small intestinal CD103+ dendritic cells display unique functional properties that are conserved between mice and humans. J Exp Med. 2008 Sep 1;205(9):2139-49., URL: https://www.ncbi.nlm.nih.gov/pubmed/18710932 ,*Zhang L, Bertucci AM, Ramsey-Goldman R, Burt RK, Datta SK: Regulatory T cell (Treg) subsets return in patients with refractory lupus following stem cell transplantation, and TGF-beta-producing CD8+ Treg cells are associated with immunological remission of lupus. J Immunol. 2009 Nov 15;183(10):6346-58., URL: https://www.ncbi.nlm.nih.gov/pubmed/19841178 ,*Cardoso CR, Garlet GP, Moreira AP, Júnior WM, Rossi MA, Silva JS: Characterization of CD4+CD25+ natural regulatory T cells in the inflammatory infiltrate of human chronic periodontitis. J Leukoc Biol. 2008 Jul;84(1):311-8., URL: https://www.ncbi.nlm.nih.gov/pubmed/18451325 ,*Brandes M, Willmann K, Lang AB, Nam KH, Jin C, Brenner MB, Morita CT, Moser B: Flexible migration program regulates gamma delta T-cell involvement in humoral immunity. Blood. 2003 Nov 15;102(10):3693-701., URL: https://www.ncbi.nlm.nih.gov/pubmed/12881309 ,*Kost CB, Holden JT, Mann KP: Marginal zone B-cell lymphoma: a retrospective immunophenotypic analysis. Cytometry B Clin Cytom. 2008 Sep;74(5):282-6., URL: https://www.ncbi.nlm.nih.gov/pubmed/18500740 ,*French JJ, Cresswell J, Wong WK, Seymour K, Charnley RM, Kirby JA: T cell adhesion and cytolysis of pancreatic cancer cells: a role for E-cadherin in immunotherapy? Br J Cancer. 2002 Oct 21;87(9):1034-41., URL: https://www.ncbi.nlm.nih.gov/pubmed/12434297 ,*Sigmundsdottir H, Johnston A, Gudjonsson JE, Bjarnason B, Valdimarsson H: Methotrexate markedly reduces the expression of vascular E-selectin, cutaneous lymphocyte-associated antigen and the numbers of mononuclear leucocytes in psoriatic skin. Exp Dermatol. 2004 Jul;13(7):426-34., URL: https://www.ncbi.nlm.nih.gov/pubmed/15217363 ,*León F, Roy G: Isolation of human small bowel intraepithelial lymphocytes by annexin V-coated magnetic beads. Lab Invest. 2004 Jun;84(6):804-9., URL: http://www.ncbi.nlm.nih.gov/pubmed/15154017 ,

NCBI AND UNIPROT INFORMATION

NCBI GI #	226694184
NCBI GeneID	3682
UniProt Accession #	P38570 ; Q17RS6 ; Q9NZU9
Molecular Weight	130,159 Da
NCBI Official Full Name	Integrin alpha-E
NCBI Official Synonym Full Names	integrin, alpha E (antigen CD103, human mucosal lymphocyte antigen 1; alpha polypeptide)
NCBI Official Symbol	ITGAE
NCBI Official Synonym Symbols	CD103; HUMINAE
NCBI Protein Information	integrin alpha-E; HML-1 antigen; integrin alpha-IEL; mucosal lymphocyte 1 antigen; antigen CD103, human mucosal lymphocyte antigen 1; alpha polypeptide
UniProt Protein Name	Integrin alpha-E
UniProt Gene Name	ITGAE
UniProt Entry Name	ITAE_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

