

RecomAb™

CLEC4M recombinant monoclonal antibody, clone 16E7

Catalog # RAB00096 Size 200 ug

Specification	
Product Description	Rabbit recombinant monoclonal antibody raised against human CLEC4M.
Antibody Species	Rabbit
Immunogen	Original antibody is raised against human CD299.
Reactivity	Human
Specificity	This antibody recognizes human CLEC4M, which is an oligomeric type II transmembrane protein with a C-type lectin extracellular domain, the expression of which is restricted to immature DC, macropha ges in the lung, and endothelial cells in the liver. It binds ICAM-3 and ICAM-7 to mediate the interaction of DC with T lymphocytes and endothelial cells in the initial stages of immune response and in the migratory behavior of DC. CD299 also binds the gp120 protein of HIV and the E2 envelope protein of HCV, thereby playing a role in viral infection.
Form	Liquid
Purification	Protein A affinity purification
Isotype	lgG, kappa
Recommend Usage	Flow Cytometry (1 ug/mL) Immunohistochemistry (5 ug/mL) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH 7.2 (0.02% Proclin 300)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.

Applications

Immunohistochemistry



Flow Cytometry

Gene Info — CLEC4M		
Entrez GenelD	10332	
Protein Accession#	Q9H2X3	
Gene Name	CLEC4M	
Gene Alias	CD209L, CD299, DC-SIGN2, DC-SIGNR, DCSIGNR, HP10347, L-SIGN, LSIGN, MGC129964, MGC47866	
Gene Description	C-type lectin domain family 4, member M	
Omim ID	605872	
Gene Ontology	<u>Hyperlink</u>	
Gene Summary	This gene encodes a transmembrane receptor and is often referred to as L-SIGN because of its e xpression in the endothelial cells of the lymph nodes and liver. The encoded protein is involved in the innate immune system and recognizes numerous evolutionarily divergent pathogens ranging from parasites to viruses, with a large impact on public health. The protein is organized into three distinct domains: an N-terminal transmembrane domain, a tandem-repeat neck domain and C-type lectin carbohydrate recognition domain. The extracellular region consisting of the C-type lectin and neck domains has a dual function as a pathogen recognition receptor and a cell adhesion receptor by binding carbohydrate ligands on the surface of microbes and endogenous cells. The neck region is important for homo-oligomerization which allows the receptor to bind multivalent ligands with high avidity. Variations in the number of 23 amino acid repeats in the neck domain of this protein are common and have a significant impact on ligand binding ability. This gene is closely related in terms of both sequence and function to a neighboring gene (GeneID 30835; often referred to as DC-SIGN or CD209). DC-SIGN and L-SIGN differ in their ligand-binding properties and distribution. Alternative splicing results in multiple variants	
Other Designations	CD209 antigen-like CD299 antigen dendritic cell-specific ICAM-3-grabbing nonintegrin 2 liver/lymph node-specific ICAM-3 grabbing non-integrin mannose binding C-type lectin DC-SIGNR	

Disease

- Communicable Diseases
- Disease Susceptibility
- Genetic Predisposition to Disease
- Hepatitis C



- HIV Infections
- HIV Seropositivity
- Severe Acute Respiratory Syndrome
- Sexually Transmitted Diseases