



CD209A peptide (DAG-P0416)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description

Pathogen-recognition receptor expressed on the surface of immature dendritic cells (DCs) and involved in initiation of primary immune response. Thought to mediate the endocytosis of pathogens which are subsequently degraded in lysosomal compartments. The receptor returns to the cell membrane surface and the pathogen-derived antigens are presented to resting T-cells via MHC class II proteins to initiate the adaptive immune response. Probably recognizes in a calcium-dependent manner high mannose N-linked oligosaccharides in a variety of pathogen antigens, including HIV-1 gp120, HIV-2 gp120, SIV gp120, ebolavirus glycoproteins, cytomegalovirus gB, HCV E2, dengue virus gE, Leishmania pifanoi LPG, Lewis-x antigen in Helicobacter pylori LPS, mannose in Klebsiella pneumoniae LPS, di-mannose and tri-mannose in Mycobacterium tuberculosis ManLAM and Lewis-x antigen in Schistosoma mansoni SEA. On DCs it is a high affinity receptor for ICAM2 and ICAM3 by binding to mannose-like carbohydrates. May act as a DC rolling receptor that mediates transendothelial migration of DC precursors from blood to tissues by binding endothelial ICAM2. Seems to regulate DC-induced T-cell proliferation by binding to ICAM3 on T-cells in the immunological synapse formed between DC and T-cells.

Specificity

Predominantly expressed in dendritic cells and in DC-residing tissues. Also found in placental macrophages, endothelial cells of placental vascular channels, peripheral blood mononuclear cells, and THP-1 monocytes.

Purity

70 - 90% by HPLC.

Conjugate

Unconjugated

Sequence Similarities

Contains 1 C-type lectin domain.

Preservative

None

Storage

Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

GENE INFORMATION

Gene Name	Cd209a CD209a antigen [Mus musculus (house mouse)]
Official Symbol	CD209A
Synonyms	CD209A; CD209a antigen; CIRE; CD209; CDSIGN; Dcsign; SIGNR5; DC-SIGN; SIGN-R1; DC-SIGN1; CD209 antigen-like protein A; dendritic cell-specific ICAM-3-grabbing non-integrin;
Entrez Gene ID	170786
mRNA Refseq	NM_133238.5
Protein Refseq	NP_573501.1
UniProt ID	Q91ZX1
Chromosome Location	8 A1.1; 8
Pathway	Measles, organism-specific biosystem; Measles, conserved biosystem; Phagosome, organism-specific biosystem; Phagosome, conserved biosystem; Tuberculosis, organism-specific biosystem; Tuberculosis, conserved biosystem;
Function	carbohydrate binding; mannose binding; metal ion binding;