



## Human CD209 peptide (DAG-P0415)

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

### PRODUCT INFORMATION

#### Antigen Description

This gene encodes a transmembrane receptor and is often referred to as DC-SIGN because of its expression on the surface of dendritic cells and macrophages. 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 rare but 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 10332; often referred to as L-SIGN). DC-SIGN and L-SIGN differ in their ligand-binding properties and distribution. Alternative splicing results in multiple variants.[provided by RefSeq, Feb 2009]

#### 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.

#### Format

Liquid

#### 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	<a href="#">CD209 CD209 molecule [ Homo sapiens (human) ]</a>
Official Symbol	CD209
Synonyms	CD209; CD209 molecule; CDSIGN; CLEC4L; DC-SIGN; DC-SIGN1; CD209 antigen; HIV gp120-binding protein; C-type lectin domain family 4 member L; C-type lectin domain family 4, member L; dendritic cell-specific ICAM-3-grabbing non-integrin 1; dendritic cell-specific intracellular adhesion molecules (ICAM)-3 grabbing non-integrin;
Entrez Gene ID	<a href="#">30835</a>
mRNA Refseq	<a href="#">NM_001144893.1</a>
Protein Refseq	<a href="#">NP_001138365.1</a>
UniProt ID	B2R907
Chromosome Location	19p13
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; peptide antigen binding; virion binding;