



Recombinant Protein Technical Manual

**Recombinant Human DC-SIGNR/CD299/CLEC4M
Protein (Fc Tag)**
RPES2014

Product Data:

Product SKU: RPES2014

Size: 50µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_055072.3

Protein Information:

Molecular Mass: 65 kDa

AP Molecular Mass: 11040 kDa & 65-70 kDa

Tag: N-Fc

Bio-activity:

Purity: > 90 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: CD209L;CD299;CLEC4M;DC-SIGN2;DC-SIGNR;DCSIGNR;HP10347;L-SIGN;LSIGN;MGC129964;MGC47866

Immunogen Information:

Sequence: Ser 78-Glu 399

Background:

C-type lectin domain family 4, member M, also known as DC-SIGNR and CLEC4M, is a type II integral membrane protein that is 77% amino acid identical to DC-SIGN, an HIV gp120-binding protein. Though the encoded gene located in the same chromosome, DC-SIGN is expressed solely on dendritic cells, while DC-SIGNR is predominantly found in liver sinusoidal endothelial cells and lymph node, as well as placental endothelium. DC-SIGNR exists as a homotetramer, and the tandem repeat domain, also called neck domain, mediates oligomerization. DC-SIGNR is regarded as a pathogen-recognition receptor involved in peripheral immune surveillance in liver, and probably mediate the endocytosis of pathogens which are subsequently degraded in lysosomal compartments. DC-SIGNR appears to selectively recognize and bind many viral surface glycoproteins containing high mannose N-linked oligosaccharides in a calcium-dependent manner, including HIV gp120, HIV-2 gp120, SIV gp120, ebolavirus glycoproteins, HCV E2, and human SARS coronavirus protein S, as well as the cellular adhesion protein ICAM3. DC-SIGNR have been thought to play an important role in establishing HIV infection by enhancing trans-infection of CD4(+)T cells in the regional lymph nodes. It may affect susceptibility to HIV infection by a mechanism that is different in females and males. DC-SIGNR can bind to hepatitis C virus (HCV), and its polymorphism might affect HCV loads supporting the concept that DC-SIGNR contributes to HCV replication efficacy.