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Product Information

MemDX™ Recombinant Human DC-SIGN Membrane Protein in Virus-Like Particles (MP-VLPs)

Cat. No.: **MPVLP-032**
This product is for research use only and is not intended for diagnostic use.

This product is recombinant Human DC-SIGN in VLPs form. This product is produced from mammalian cells by co-expressing the retroviral structural core polyprotein (gag) and the target membrane protein. MP-VLPs display highly-expressed copies of membrane proteins in their native conformation, providing an alternative to membrane protein stable cell lines, membrane preparations, detergent-solubilized proteins and other membrane protein preparation strategies. MP-VLPs can be used for a wide range of applications in antibody production, antibody discovery, antibody characterization, binding assays and functional assays.

Product Specifications

Host Species
Human

Target Protein
DC-SIGN

Protein Length
Full length

Protein Class
Host cell receptor for virus entry; Receptor

TMD
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Product Description

Application
ELISA; Antibody Production; Antibody Discovery; Antibody Characterization; Binding Assays; Functional Assays

Expression Systems
HEK293 expression system

Protein Format
Membrane Protein-Virus Like Particles (MP-VLPs)

Form
Liquid

Storage

The product should be stored at -20°C or lower. Avoid freeze-thaw cycles.

Target

Target Protein

DC-SIGN

Full Name

CD209 molecule

Introduction

This gene encodes a C-type lectin that functions in cell adhesion and pathogen recognition. This receptor recognizes a wide range of evolutionarily divergent pathogens with a large impact on public health, including leprosy and tuberculosis mycobacteria, the Ebola, hepatitis C, HIV-1 and Dengue viruses, and the SARS-CoV acute respiratory syndrome coronavirus. The protein is organized into four distinct domains: a C-terminal carbohydrate recognition domain, a flexible tandem-repeat neck domain, a transmembrane region and an N-terminal cytoplasmic domain involved in internalization. This gene is closely related in terms of both sequence and function to a neighboring gene, CLEC4M (Gene ID: 10332), also known as L-SIGN. The two genes differ in viral recognition and expression patterns, with this gene showing high expression on the surface of dendritic cells. Polymorphisms in the neck region are associated with protection from HIV-1 infection, while single nucleotide polymorphisms in the promoter of this gene are associated with differing resistance and susceptibility to and severity of infectious disease, including rs4804803, which is associated with SARS severity.

Alternative Names

CDSIGN; CLEC4L; DC-SIGN; DC-SIGN1; CD209; CD209 antigen; C-type lectin domain family 4 member L; HIV gpl20-binding protein; dendritic cell-specific ICAM-3-grabbing non-integrin 1; dendritic cell-specific intercellular adhesion molecule-3-grabbing non-integrin; dendritic cell-specific intracellular adhesion molecules (ICAM)-3 grabbing non-integrin

Gene ID

30835

UniProt ID

Q9NNX6

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