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DATA SHEET

Reagent: Human DC-SIGN Expression Vector (pcDNA3-DC-SIGN)

Catalog Number: 5444

Lot Number: 071006

Release Category: A

Provided: 7 µg of dried purified DNA stabilized in DNastable *PLUS*

Cloning Site: The DC-SIGN sequence (GenBank Accession #M98457) was inserted via *Bam*HI (5') and *Eco*RI (3') into pcDNA3. The size of the insert is approximately 1.2 kb.

Cloning Vector: The cloning vector is pcDNA3 (Invitrogen), the size of the insert plus vector is approximately 6.6 kb.

Description: DC-SIGN cDNA was amplified from human dendritic cells and cloned between the *Bam*HI, *Eco*RI restriction sites of pcDNA3. The primers used to amplify DC-SIGN and to introduce the necessary restrictions sites were p5-DC (5'-CCGGATCCAGAGTGGGGTGACATGAGTG-3') and p3-DC (5'-CCGAATTCGGAAGTTCTGCTACGCAGGAG-3'). The sequence obtained differs at two positions from the published sequence. Glu 241 is encoded by GAA instead of GAG and Ser 333 is encoded by TCG instead of TCA.

Special Characteristics: DC-SIGN is a C-type lectin, which efficiently binds and transmits HIV-1, HIV-2 and SIV to receptor positive cells. This clone can be used for DC-SIGN expression in mammalian cells. For example, transfection of 293T cells with this clone results in robust DC-SIGN surface expression. Other cell types which could be used for expression are HeLa and COS cells. pcDNA3 carries both an ampicillin and neomycin resistance gene.

[Plasmid map and sequence file lot 071006](#)

This reagent is currently being provided as dried purified DNA stabilized in DNastable *PLUS*. Please see the notice for additional information and the protocol for reconstitution of dried DNA reagents. [Dried DNA Notice](#)

ALL RECIPIENTS OF THIS MATERIAL MUST COMPLY WITH ALL APPLICABLE BIOLOGICAL, CHEMICAL, AND/OR RADIOCHEMICAL SAFETY STANDARDS INCLUDING SPECIAL PRACTICES, EQUIPMENT, FACILITIES, AND REGULATIONS. NOT FOR USE IN HUMANS.

Recommended Storage: Keep the reagent at room temperature in a dry storage cabinet or in a moisture barrier bag.

Contributor: Drs. S. Pöhlmann, F. Baribaud, F. Kirchhoff and R.W. Doms.

References: Pöhlmann S, Baribaud F, Lee B, Leslie GJ, Sanchez MD, Hiebenthal-Millow K, Münch J, Kirchhoff F, Doms RW. DC-SIGN interactions with human immunodeficiency virus type 1, type 2 and simian immunodeficiency virus. *J Virol* **75**:4664-4672, 2001.

NOTE: Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, NIAID, NIH: Human DC-SIGN Expression Vector (pcDNA3-DC-SIGN) from Drs. S. Pöhlmann, F. Baribaud, F. Kirchhoff and R.W. Doms (cat# 5444)." Also include the reference cited above in any publications.

Last Updated: August 03, 2018

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