

Data Sheet

**NAME:** pcDNA3-DC-SIGN

**REPOSITORY REFERENCE :** ARP2117

**PROVIDED:** 50µg DNA in TE buffer

**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 1.2kb.

**CLONING VECTOR:** The cloning vector is pcDNA3 (Invitrogen), the size of the insert plus vector is approximately 6.6kb.

**DESCRIPTION:** DC-SIGN cDNA was amplified from human dendritic cells and cloned between the *Bam*HI, and *Eco*RI restriction sites of pcDNA. The primers used to amplify DC-SIGN and to introduce the necessary restriction 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 a neomycin resistance gene.

**STORAGE :** -70°C

**SOURCE :** Drs. S. Pohlmann, F.Baribaud, F.Kirchhoff and R.W.Doms.  
(courtesy of NIH AIDS Research and reference Reagent Programme.)

**REFERENCE :** Pohlmann S. et al, *J Virol* **75**:4664-4672, 2001

**ACKNOWLEDGEMENTS :** Publications should acknowledge the donor of the reagent and the Programme EVA Centre for AIDS Reagents. Suggested wording can be found on our website at <http://www.nibsc.ac.uk/spotlight/aidsreagent/index.html> in the “Acknowledgements” section.  
Please also ensure that you send us a copy of any papers resulting from work using reagents acquired through CFAR (this can be electronically or as a paper copy)

**PLASMID MAP :**

Comments for pcDNA3: 5446 nucleotides

CMV promoter: bases 209-863

T7 promoter: bases 864-882

Polylinker: bases 889-994

Sp6 promoter: bases 999-1016

BGH poly A: bases 1018-1249

SV40 promoter: bases 1790-2115

SV40 origin of replication: bases 1984-2069 Neomycin

ORF: bases 2151-2945

SV40 poly A: bases 3000-3372

ColE1 origin: bases 3632-4305

Ampicillin ORF: bases 4450-5310

