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DATA SHEET

Reagent:	HIV-1 NL4-3 Gag-iGFP ΔEnv Non-Infectious Molecular Clone
Catalog Number:	12455
Lot Number:	130200
Release Category:	B
Provided:	10 µg
Description:	This full-length molecular clone of HIV derived from pNL4-3 carries green fluorescent protein (GFP) inserted into the Gag protein between the MA and CA domains of Gag, with HIV protease cleavage sites created to flank the GFP insertion. A frame shift mutation (restriction site NdeI) was also introduced to disrupt the Env open reading frame making this clone effectively Env null. This plasmid may be used to generate fluorescently labeled HIV particles and may be pseudotyped by cotransfection with Env expression plasmids or used as a negative control for HIV Gag-iGFP
Special Characteristics:	May be used as a control or pseudotyped in assays to monitor the efficiency of virus uptake or transfer using flow cytometry, localizing virus production in infected cells using live or fixed cell fluorescence microscopy, monitoring cell-to-cell transmission of HIV, single particle imaging, single particle fusion assays Sequence. Plasmid map.
Recommended Storage:	-80°C
Contributor:	Dr. Benjamin Chen

References:

Hubner, W. et al. Sequence of human immunodeficiency virus type 1 (HIV-1) Gag localization and oligomerization monitored with live confocal imaging of a replication-competent, fluorescently tagged HIV-1. J Virol 81, 12596-12607 (2007).

Chen, P., Hubner, W., Spinelli, M.A. & Chen, B.K. Predominant mode of human immunodeficiency virus transfer between T cells is mediated by sustained Env-dependent neutralization-resistant virological synapses. J Virol 81, 12582-12595 (2007).

Hubner, W. et al. Quantitative 3D video microscopy of HIV transfer across T cell virological synapses. Science 323, 1743-1747 (2009)

NOTE:

Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: HIV Gag-iGFP delta Env from Dr. Benjamin Chen." Also include the reference cited above in any publication.

Last Updated:

August 21, 2017