

QuickTiter HIV Lentivirus (p24 ELISA) Assay Kit

QuickTiter HIV Lentivirus Quantitation Kit (p24 ELISA)

CATALOG #
AAA44583

PRODUCT SYNONYMS

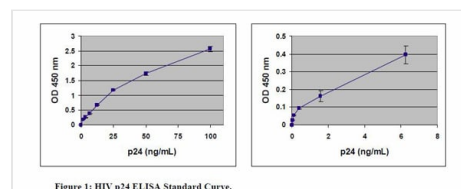
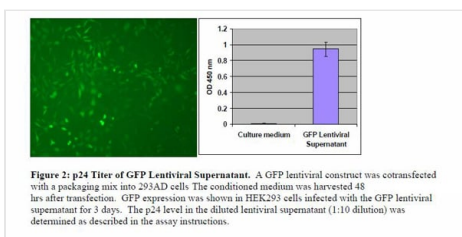
QuickTiter HIV Lentivirus (p24 ELISA); QuickTiter HIV Lentivirus Quantitation Kit (p24 ELISA); QuickTiter HIV Lentivirus (p24 ELISA) assay kit

PRODUCT SPECIFICATIONS

Preparation and Storage

Upon receiving, aliquot and store recombinant HIV-1 p24 Standard at -20 degree C and avoid freeze/thaw. Store all other components at 4 degree C until their expiration dates.

IMAGES



Application Data

Application Data

ADDITIONAL INFORMATION

Related Product Information for QuickTiter HIV Lentivirus (p24 ELISA) assay kit	Principle of the Assay: An anti-HIV p24 monoclonal coating antibody is adsorbed onto a microtiter plate. p24 antigen present in the sample or standard binds to the antibodies adsorbed on the plate; a FITC-conjugated mouse anti-p24 antibody is added and binds to p24 antigen captured by the first antibody. Following incubation and wash steps, a HRP-conjugated mouse anti-FITC antibody is added and binds to the FITC conjugated anti-p24. Following unbound HRP-conjugated mouse anti-FITC antibody is removed during a wash step, and substrate solution reactive with HRP is added to the wells. A colored product is formed in proportion to the amount of p24 antigen present in the sample. The reaction is terminated by addition of acid and absorbance is measured at 450 nm. A standard curve is prepared from recombinant HIV-1 p24 protein and sample p24 concentration is then determined. !!Background/Introduction: Lentivirus vector based on the human immunodeficiency virus-1 (HIV-1) has become a promising vector for gene transfer studies. The advantageous feature of lentivirus vector is the ability of gene transfer and integration into dividing and non-dividing cells¹⁻². The pseudotyped envelope with vesicular stomatitis virus envelope G (VSV-G) protein broadens the target cell range. Lentiviral vectors have been shown to deliver genes to neurons, lymphocytes and macrophages, cell types that previous retrovirus vectors could not be used. Lentiviral vectors have also proven to be effective in transducing brain, liver, muscle, and retina in vivo without toxicity or immune responses. Recently, the lentivirus system is widely used to integrate siRNA efficiently in a wide variety of cell lines and primary cells both in vitro and in vivo. Lentivirus particles are produced from 293T cells through transient transfection of 3 or 4 plasmids that encodes for the components of the virion. Viral medium containing viral particles produced by packaging cells within 48-72 hr can be harvested. To ensure that pseudoviral medium is viable, and to control the number of copies of integrated viral constructs per target cell, the viral titer needs to be determined before proceeding with transduction experiments. Viral titer can be determined by transduction of HT-1080 or HeLa cells, and followed by antibiotic selection of stable clones. However, it takes weeks to generate sizable stable cell colonies for counting and calculating the titer results. QuickTiter™ HIV Lentiviral Quantitation Kit (HIV p24 ELISA) is an enzyme immunoassay developed for detection and quantitation of the HIV-1 p24 core protein. A mouse monoclonal antibody to HIV-1 p24 is coated onto strip wells of microtiter plate. The quantity of HIV p24 antigen is determined by comparing its absorbance with that of known recombinant p24 antigen standard curve. The kit has a detection sensitivity limit of 1 ng/mL HIV p24, or about 10,000 to 100,000 TU/mL VSVG-pseudotyped lentivirus samples³⁻⁵. Each kit provides sufficient reagents to perform up to 96 assays including standard curve and unknown samples. The kit is suitable for both viral supernatant and purified virus. The QuickTiter™ HIV Lentiviral Quantitation Kit is intended for research use only
Product Categories/Family for QuickTiter HIV Lentivirus (p24 ELISA) assay kit	Viral Expression ; Lentiviral Expression ; Lentivirus Quantitation/Titer ; Traditional p24 ELISA Kit

References

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For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.