

QuickTiter Lentivirus Titer Kit (Lentivirus-Associated p24 ELISA) Assay Kit

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CATALOG #
AAA44511

PRODUCT SYNONYMS

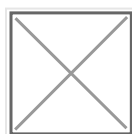
QuickTiter Lentivirus Titer Kit (Lentivirus-Associated p24 ELISA); QuickTiter Lentivirus Titer Kit (Lentivirus-Associated p24 ELISA) assay kit

PRODUCT SPECIFICATIONS

Preparation and Storage

Upon receipt, aliquot and store the Recombinant HIV-1 p24 Standard at -20 degree C to avoid multiple freeze/thaw cycles. Store all other kit components at 4 degree C until their expiration dates.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for QuickTiter Lentivirus Titer Kit (Lentivirus-Associated p24 ELISA) assay kit

Background: 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. HIV p24 ELISA has also been used in titrating lentiviral samples, but it detects both lentivirus associated p24 and free p24 generated by 293 T cells during transient transfection. Therefore, total p24 level (lentivirus p24 and free p24) can not be used to precisely determine the viral particles in lentivirus supernatant samples. QuickTiter™ Lentivirus Titer Kit (Lentivirus Associated HIV p24) is an enzyme immunoassay developed for detection and quantitation of the lentivirus associated HIV-1 p24 core protein only (See Assay Principle below). After forming complexes with ViraBind™ lentivirus reagents (patented technology), while free p24 remains in supernatant, the amount of lentivirus associated p24 is measured by a HIV p24 ELISA. The kit has detection sensitivity limit of 1 ng/mL HIV p24, or about 10,000 to 100,000 TU/mL VSVG-pseudotyped lentivirus samples³⁻⁵. Each Trial Size Lentivirus Titer Kit provides sufficient reagents to perform up to 32 assays including standard curve and lentiviral samples. QuickTiter™ Lentivirus Titer Kit (Lentivirus Associated HIV p24) provides an efficient system for rapid quantitation of lentivirus titer for both viral supernatant and purified virus.

Product Categories/Family for QuickTiter Lentivirus Titer Kit (Lentivirus-Associated p24 ELISA) assay kit

[Viral Expression](#); [Lentiviral Expression](#); [Lentivirus Quantitation/Titer](#); [Lentivirus-Associated 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.

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Online datasheet: <https://stage.aaabiotech.com/assay-kits/quicktiter-lentivirus-titer-kit-lentivirus-associated-p24-elisa/44511>