

Rapid RCA Assay Kit

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CATALOG #
AAA11401

PRODUCT SYNONYMS

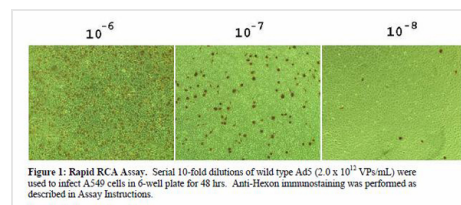
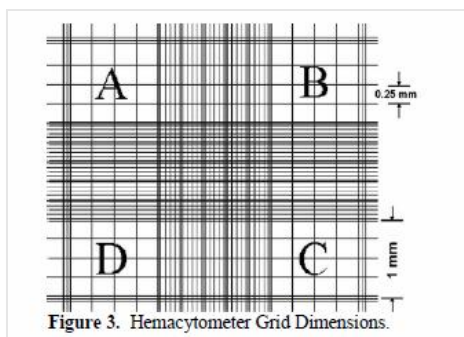
Rapid RCA; Rapid RCA Assay Kit; Rapid RCA assay kit

PRODUCT SPECIFICATIONS

Preparation and Storage

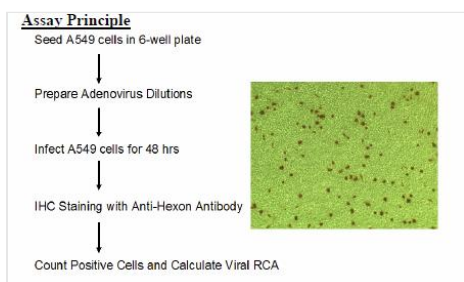
Store all kit components at 4 degree C until their expiration dates.

IMAGES



Application Data

Application Data



Application Data

ADDITIONAL INFORMATION

Related Product Information for Rapid RCA assay kit	Background/Introduction: Recombinant adenoviruses have tremendous potential in both research and therapeutic applications. They provide numerous advantages when introducing genetic material into host cells. The permissive host cell range is very wide. Adenovirus has been used to infect many mammalian cell types (both replicative and non-replicative) for high expression of the recombinant protein. Recombinant adenoviruses are especially useful for gene transfer and protein expression in cell lines that have low transfection efficiency with liposome. After entering cells, the virus remains epichromosomal (i.e. does not integrate into the host chromosome so does not activate or inactivate host genes). Recently, recombinant adenoviruses have been used to deliver RNAi into cells. HEK 293 cells or their variants are used as host cells for viral amplification. Recombinant adenoviruses can be grown at high titer, e.g. 1010 VP (viral particles)/mL, which can be concentrated up to 1013 VP/mL, and subsequently purified by ViraBind™ Adenoviral Purification Kit or traditional CsCl ultracentrifugation. During adenovirus vector production, particles may be generated which are replication competent. The probability of producing replication competent adenovirus (RCA), although low, increases with each successive amplification. RCA is thought to be produced via homologous recombination. Traditionally, RCA is measured in permissive cells by a plaque-forming unit (PFU) assay that scores the number of viral plaques as a function of dilution. These methods are time-consuming (10-14 days), require a long infection period, and suffer from a high degree of inter-assay variability and are affected by virus-cell interactions. Rapid RCA Assay Kit utilizes an antibody against adenovirus hexon proteins to visualize infected cells by immunocytochemistry staining, the kit antibody against hexon protein recognizes all serotypes of adenovirus. The hexon proteins are the largest and most abundant of the structural proteins in the adenovirus capsid, and they are distributed symmetrically to form capsid facets. Rapid RCA Assay Kit provides a quick and complete system to measure the titer of replication-competent virus in your viral prep. In contrast to the 10-day infection of a classical plaque assay, the kit only requires 2-day infection. The kit provides sufficient reagents for up to 30 tests in 6-well culture plates.
Product Categories/Family for Rapid RCA assay kit	Viral Expression; Adenoviral Expression; Replication Competent Adenovirus Assay
References	1. Bewig, B., and W. E. Schmidt (2000) Accelerated titering of adenoviruses. BioTechniques 28:870-873. Dubuisson, O. et al. (2015). Accurate identification of neutralizing antibodies to adenovirus Ad36, a putative contributor of obesity in humans. J Diabetes Complications. 29: 83-87.

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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://www.aaabiotech.com/assay-kits/rapid-rca/11401>