Datasheet for ABIN2345170

Miniprep Kit

10 Publications

Go to Product page

Overview

Quantity:	10 preparations
Reactivity:	Adenovirus
Application:	Purification (Purif)

Product Details

Brand:	ViraBind™
Sample Type:	Cell Extracts, Cell Samples
Characteristics:	ViraBind™ Adenoviral Miniprep Kit does not involve ultracentrifugation, instead viruses are captured on spin column based on the unique properties of adenoviral capsid proteins. The entire procedure takes about 30 minutes. Each column is designed to purify viruses harvested from one T75 flask or 11 10-cm plate, and has a capacity of up to 1.0 x 10 VPs. ViraBind™ Adenovirus Miniprep Kit provides an efficient system for quick adenoviral purification with high recovery (>95 %). The system may be adapted to purification of other viral types, such as retrovirus and lentivirus.
Components:	1. ViraBind™ Columns and Collection tubes : Pack of 10 mini spin columns and 20 collection tubes. 2. Loading Buffer : One 10 mL bottle. 3. Wash Buffer : One 20 mL bottle. 2 4. Elution Buffer : One 10 mL bottle of 25 mM Tris, pH 7.5, 2.5 mM Mg2Cl, 1 M NaCl.
Material not included:	1. Recombinant adenovirus of interest 2. HEK 293 cells and cell culture growth medium 3. Cell culture centrifuge 4. Glycerol

Product Details

5. Microcentrifuge

Target Details

Background:	Recombinant adenoviruses have tremendous potential in both research and therapeutic applications. There are numerous advantages in using an adenovirus to introduce genetic material into host cells. The permissive host cell range is very wide. The virus 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 10 adenoviruses can be grown at high titer (10 VP (viral particles)/mL, which can be concentrated up to 13 10 VP/mL). The concentrated viral supernatant is subjected to CsCl ultracentrifugation to separate the viruses from the cellular proteins and media components. Following ultracentrifugation, CsCl is then removed by dialysis. The CsCl procedure is both tedious and time consuming (16-24 hrs).

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Comment:	• Achieve the quality of CsCl procedures in <2 hours, without ultracentrifugation • Recover >90% adenoviral yield
Restrictions:	For Research Use only

Handling

Precaution of Use:	Remember that you will be working with samples containing infectious virus. Follow the recommended NIH guidelines for all materials containing BSL-2 organims.
Storage:	RT
Storage Comment:	Store all kit components at room temperature.

Publications

Product cited in:	Boehme, Stellberger, Solanki, Zhang, Schulz, Bergmann, Liu, Doerner, Baiker, Ehrhardt: "Standard

free droplet digital polymerase chain reaction as a new tool for the quality control of high-capacity adenoviral vectors in small-scale preparations." in: **Human gene therapy methods**, Vol. 26, Issue 1, pp. 25-34, (2015) (PubMed).

Zhu, Song, Zhang, Xia, Sun: "Inhibition of porcine reproductive and respiratory syndrome virus infection by recombinant adenovirus- and/or exosome-delivered the artificial microRNAs targeting sialoadhesin and CD163 receptors." in: **Virology journal**, Vol. 11, pp. 225, (2015) (PubMed).

Zhu, Bao, Zhang, Xia, Sun: "Inhibition of porcine reproductive and respiratory syndrome virus replication with exosome-transferred artificial microRNA targeting the 3' untranslated region." in: **Journal of virological methods**, Vol. 223, pp. 61-8, (2015) (PubMed).

Morris, Turner, Green, Warimwe: "Laboratory-Scale Production of Replication-Deficient Adenovirus Vectored Vaccines." in: **Methods in molecular biology (Clifton, N.J.)**, Vol. 1349, pp. 121-35, (2015) (PubMed).

Müller, Maurer, Reimers, Vogt, Bucan: "TRIM21, a negative modulator of LFG in breast carcinoma MDA-MB-231 cells in vitro." in: **International journal of oncology**, Vol. 47, Issue 5, pp. 1634-46, (2015) (PubMed).

There are more publications referencing this product on: Product page