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# Isolation of Adenovirus E1 Expressing Cell Lines and Strategies to Generate Adenovirus Recombinants

**Improved cell lines expressing adenovirus E1 genes enable more efficient generation and replication of E1-deleted adenoviral vectors for applications in gene therapy, vaccines, and drug delivery.**

Purdue University researchers have developed a technique for isolating cell lines with desired characteristics in the cell lines expressing adenovirus E1. Following adenovirus infection of a cell, E1 genes are the first viral genes expressed and are essential for virus replication. Therefore, the generation and growth of E1-deleted adenoviral vectors is possible only in a cell line that constitutively expresses E1 proteins. This technology involves the isolation of a number of cell lines expressing either human adenovirus (HAd) or bovine adenovirus (BAd) E1 genes. These isolated cell lines may be useful in generating and replicating adenovirus recombinants for vaccination and gene therapy applications.

**Advantages**:

-Better cell lines for propagating E1-deleted HAd or BAd

-Simple generation of cell lines with specific characteristics

Potential Applications:

-Gene therapy

-Vaccines

-Drug delivery

**TRL:** 6

**Intellectual Property:**

N/A, N/A, N/A

**Technology ID**

61033

**Category**

Biotechnology & Life Sciences/Cell & Gene Therapy Platforms

Pharmaceuticals/Drug Discovery & Development

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