ProPak-A.6

305599

GENERAL INFORMATION

Description

ProPak-A.6 (PPA.6) is a human fetal kidney-derived packaging cell line generated for the production of replication-incompetent retroviral vectors. ProPak-A.6 stably expresses adenovirus-5 E1A sequences (for transcriptional transactivation) together with gag-, pol-, and env-related proteins derived from murine leukemia virus (MLV), enabling efficient packaging of recombinant retroviral genomes into non-infectious MLV-based viral particles. The GMO-S1 classification reflects the stable integration of these viral transgenes.
ProPak-A.6 is applicable as a packaging cell line for generating high-titer recombinant MLV-based retroviral vectors for gene transfer into target cells. It is used in gene therapy vector production, stable transduction of dividing cell populations, and studies requiring efficient retroviral delivery of transgenes. The adenovirus E1A component enhances promoter-driven expression, improving viral production efficiency. Users should follow applicable biosafety regulations for BSL-2 retroviral vector work.

Tissue	Fetal kidney
Disease	Normal fetal kidney (retroviral packaging cell line; non-tumorigenic)
Metastatic site	Not applicable (non-tumorigenic packaging cell line)

Applications

Retroviral vector production; gene therapy vector manufacturing; stable transduction of dividing cells; MLV-based retroviral gene delivery; adenovirus-assisted retroviral packaging; gene transfer research

Synonyms

- ProPakA.6
- PPA.6
- PP-A.6

CLASSIFICATION

Organism	Human
Sex	Female
Growth properties	Adherent
GMO status	GMO-S1

GMO status details

GMO-S1: This human kidney-derived cell line (ProPaka.6) contains plasmid constructs encoding adenovirus-5 sequences together with gag-, pol-, and env-related proteins that form non-infectious murine leukemia virus particles. The inserts are stably integrated. This classification applies only within Germany and may differ elsewhere.

Biosafety level	2

CHARACTERISTICS

Morphology	Epithelial-like
Cell type	Epithelial cells
Doubling time	approx. 24 to 36 hours

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Banking information
Sparkasse Heidelberg
IBAN: DE35 6725 0020 0009 2076 86
BIC: SOLADES1HDB

IDENTIFIERS

Citation

ProPak-A.6 (Cytion catalog number 305599)

NCBI TaxID	9606
Cellosaurus	CVCL_8968

HANDLING AND CULTURE

Culture medium

DMEM, w: 4.5 g/L Glucose, w: 4 mM L-Glutamine, w: 3.7 g/L NaHCO3, w: 1.0 mM Sodium pyruvate (Cytion article number 820300a)

Incubation atmosphere	37°C, 5% CO_2, humidified atmosphere.

Supplements

Supplement the medium with 10% FBS

Dissociation reagent	Accutase

Subculturing

Remove medium, wash with PBS without calcium and magnesium, cover with Accutase, incubate 8–10 min at RT, resuspend in medium, centrifuge 300×g 3 min, discard supernatant, reseed in fresh medium.

Split ratio	1 to 5
Seeding density	1 to 3 × 10^4 cells/cm^2
Fluid renewal	Every 1 to 2 days

Thawing and culturing

Confirm that the vial remains deeply frozen upon delivery, as cells are shipped on dry ice to maintain optimal temperatures during transit. Upon receipt, either store the cryovial immediately at temperatures below -150°C to ensure the preservation of cellular integrity, or proceed to step 3 if immediate culturing is required.
For immediate culturing, swiftly thaw the vial by immersing it in a 37°C water bath with clean water and an antimicrobial agent, agitating gently for 40-60 seconds until a small ice clump remains.
Perform all subsequent steps under sterile conditions in a flow hood, disinfecting the cryovial with 70% ethanol before opening.
Carefully open the disinfected vial and transfer the cell suspension into a 15 ml centrifuge tube containing 8 ml of room-temperature culture medium, mixing gently.
Centrifuge the mixture at 200 x g for 5 minutes, carefully discard the supernatant containing freezing medium.
Follow the procedure described under Post-Thaw Recovery

QUALITY CONTROL AND CRYOPRESERVATION

Freeze medium	As a cryopreservation medium, we use complete growth medium + 10% DMSO for adequate post-thaw viability.

Storage conditions

For long-term preservation, place vials in vapor-phase liquid nitrogen at about −150 to −196 °C. Storage at −80 °C is acceptable only as a short interim step before transfer to liquid nitrogen.

Shipping conditions

Cryopreserved cell lines are shipped on dry ice in validated, insulated packaging with sufficient refrigerant to maintain approximately −78 °C throughout transit. On receipt, inspect the container immediately and transfer vials without delay to appropriate storage.

DONOR

Donor age	Fetus

LEGAL AND SAFETY

Safety precautions

When planning to store a cryovial in liquid nitrogen for future thawing, it is mandatory to adhere to stringent safety measures. Appropriate protective gloves and clothing are essential, and the use of a face mask or safety goggles is required during the transfer of frozen samples to or from the liquid nitrogen tank. This is to mitigate the risk of injury from potential cryovial explosions upon removal, which can result in the projection of sharp fragments.

Warranty

At Cytion, we stand behind the quality and viability of our products.
We guarantee that our cells will be viable at the start of culture for
60 days after shipment from our facilities.
We assure that all materials conform to the specifications described in the
Certificate of Analysis and/or Product Sheet.
For full details, please refer to our
Warranty Statement.

Material Transfer Agreement required	Yes

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