Certificate of Analysis

GP2-293 Packaging Cell Line

Catalog No.	Amount	Lot Number
631458 (Not sold separately) Sold as a part of 631188, 631512, 631530, 634304, & 634307	1 ml	Specified on product label.

Description

GP2-293 is a HEK 293-based retroviral packaging cell line. The essential viral packaging genes *gag* and *pol* are stably integrated; the viral envelope must be supplied in trans. High titer retrovirus is produced by transient co-transfection of an MMLV- or MSCV-based retroviral expression vector and a plasmid that expresses a viral envelope, such as pVSV-G.

Package Contents

- 1 ml GP2-293 Packaging Cell Line (2 x 10^6 cells)

Storage Conditions

- Store cells in liquid nitrogen (–196°C) or in a –150°C freezer

Shelf Life

- 1 year from date of receipt under proper storage conditions.

Storage Buffer

- Cell Freezing Medium-DMSO 1x (Sigma-Aldrich Co., Cat. No. C6164)

Shipping Conditions

- Dry ice

Product Documents

Documents for our products are available for download at **takarabio.com/manuals**
The following documents apply to this product:

- Retroviral Gene Transfer and Expression User Manual (PT3132-1)

Cell Type Information

GP2-293 is an HEK-derived cell line transformed with adenovirus type 5 DNA (HEK-293). The cells were engineered to express the MoMuLV Gag and Pol proteins.

Recommended Cell Culture Medium

90% DMEM; 10% fetal bovine serum; 4 mM L-glutamine; 100 units/ml penicillin G sodium; 100 µg/ml streptomycin sulfate; and 1 mM sodium pyruvate.

Takara Bio USA, Inc.
2560 Orchard Parkway, San Jose, CA 95131, USA
U.S. Technical Support: technical_support@takarabio.com

United States/Canada 800.662.2566
Asia Pacific +1.650.919.7300
Europe +33.(0)1.3904.6880
Japan +81.(0)77.565.6999

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Recommendations for Thawing Frozen Cells

We recommend initiating the culture as soon as possible upon receipt. If the cells cannot be thawed and cultured immediately upon receipt, the vial should be held at temperatures below –79ºC, preferably in liquid nitrogen vapor.

1. Thaw rapidly by placing tube of frozen culture in a 37°C water bath.
2. To reduce osmotic shock, dilute the cell suspension in 1 ml of complete growth medium and transfer it to a sterile 15 ml-tube.
3. Add 5 ml of complete medium and mix.
4. Add an additional 5 ml of complete medium and mix gently.
5. Pellet the cells for 10 min at 125*g*. Discard supernatant.
6. Resuspend the pellet in 10 ml of complete growth medium and seed culture into a **collagen-coated** flask or culture dish.

NOTE: Culture vessels coated with compounds other than collagen may provide suitable growth substrates for GP2-293 cells; however, only collagen-coated plates have been tested at Takara Bio USA, Inc. We recommend the Corning BioCoat Collagen I Cellware for culturing GP2-293 cells. The cells may be cultured on regular flasks/dishes (i.e., non-coated flasks/dishes) after recovery; however, if adherence is poor, we recommend collagen-coated vessels for all culturing purposes, including viral packaging.

Quality Control Data

Functional Tests

GP2-293 cells were transfected with plasmid DNA encoding ZsGreen1 as described in the Retroviral Gene Transfer and Expression User Manual. 48 hr post-transfection, viral supernatant was used to transduce HT1080 cells. ZsGreen1 expression was assessed by flow cytometry, and viral titer (as determined by the percentage of cells expressing ZsGreen1) was demonstrated to be at least $1x10^6$ IFU/ml.

Mycoplasma Contamination Test

This lot of the GP2-293 Packaging Cell Line was tested and found to be free of *Mycoplasma* contamination.

NOTE: The viral supernatants produced by these retroviral systems could, depending on your cloned insert, contain potentially hazardous recombinant virus. Due caution must be exercised in the production and handling of recombinant retrovirus. Appropriate NIH, regional, and institutional guidelines apply. The User Manual contains other general information and precautions.

It is certified that this product meets the above specifications, as reviewed and approved by the Quality Department.

Notice to Purchaser

GP2-293 Packaging Cell Line

CATALOG NO.

631458

NOTICE TO PURCHASER:

Our products are to be used for **Research Use Only**. They may not be used for any other purpose, including, but not limited to, use in humans, therapeutic or diagnostic use, or commercial use of any kind. Our products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products or to provide a service to third parties without our prior written approval.

Your use of this product is also subject to compliance with the licensing requirements, listed below if applicable, and described on the product´s web page at http://www.takarabio.com. It is your responsibility to review, understand and adhere to any restrictions imposed by these statements.

TRADEMARKS:

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2/14/2022