# Certificate of Analysis



# Cellartis® Human ES Cell Line 121 (SA121)

Catalog No. Amount Lot Number Y00020 (Not sold separately) 1 vial Specified on p

Y00020 (Not sold separately) Sold as part of Y00025 Specified on product label

## **Description**

Cellartis Human ES Cell Line 121 (SA121) contains human embryonic stem (hES) cells frozen as a single-cell suspension (≥1.5 x 10<sup>6</sup> viable cells/vial). Prior to cryopreservation, the cells were cultured using the Cellartis DEF-CS<sup>TM</sup> 500 Culture System (Cat. No. Y30010). Cellartis Human ES Cell Line 121 (SA121) is sold as a part of the Cellartis Human ES Cell Line 121 (SA121) Kit, which also contains the Cellartis DEF-CS 100 Culture System – a complete system optimized for hES cell cultures. The Cellartis DEF-CS 500 Culture System should be purchased separately for continued culturing of Cellartis hES cell lines.

#### **Package Contents**

• 1 vial of Cellartis Human ES Cell Line 121 (SA121) (≥1.5 x 10<sup>6</sup> viable cells/vial)

#### **Storage Conditions**

• Store cells at -150°C or -196°C (liquid nitrogen vapor phase)

#### **Shelf Life**

• 1 year from date of receipt under proper storage conditions

## **Storage Medium**

• STEM-CELLBANKER® (Zenoag Resource Co. Ltd., Cat. No. ZR636)

#### **Shipping Conditions**

• Dry ice  $(-70^{\circ}\text{C})$ 

#### **Product Documents**

Documents for Takara Bio Europe AB products are available for download at <a href="www.takarabio.com/manuals">www.takarabio.com/manuals</a>
The following documents apply to this product:

Cellartis Human ES Cell Lines User Manual

# **Cell Type Information**

#### **Derivation**

The hES cell derivation process at Takara Bio Europe AB follows all applicable laws in Sweden and EU, and is approved by the regional ethical authority.

### **Donor**

This human ES cell line has a normal male karyotype 46,XY. The tissues used by Takara Bio Europe AB are from donors who have signed informed consent that outlines in detail the purpose of the donation and the procedure for processing of the donated tissue. To protect the privacy and confidentiality of the donors, the cell line is anonymized: all identifiers associated with the donors have been removed, and the cell line cannot be traced to the donating couple. Notably, the donation did not result in any financial gain for the donors. The cell line can be used for commercial purposes.

Takara Bio Europe AB

A Takara Bio Company

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## **Recommended Cell Culture Medium and Coating Substrate**

Cellartis Human ES Cell Line 121 (SA121) should be used with the Cellartis DEF-CS 500 Culture System (Cat. No. Y30010), which contains coating substrate, additives, and basal medium for optimal culture of pluripotent cell lines. Using other coating substrates or mediums may require optimization by the customer. Keep thawed Cellartis Human ES Cell Line 121 (SA121) at  $37^{\circ}$ C  $\pm$  1°C, 5% CO<sub>2</sub>, and >90% humidity.

## **Safety Precautions**

Cellartis Human ES Cell Line 121 (SA121) contains human source material and should be treated as potentially infectious. Discard cell-contaminated materials according to local regulations.

Wear suitable protective clothing, safety glasses, and gloves when handling liquid nitrogen.

#### **Additional Notes**

The cells are frozen as a single-cell suspension.

# **Quality Control Data**

#### **Functional Tests**

Each lot of Cellartis human ES cell lines has been tested for thaw recovery, morphology, growth rate, karyotyping, expression of pluripotency markers (Oct-4, TRA-1-60, TRA-1-81, and SSEA-4), and absence of differentiation marker (SSEA-1).

The pluripotency of Cellartis Human ES Cell Line 121 (SA121) has been verified via *in vitro* spontaneous differentiation into all three germ layers; ICC analysis of β-III tubulin, ASMA, and FOXA2 expression; and *in vivo* teratoma formation in SCID mice.

#### Mycoplasma Contamination Test

Each lot of Cellartis human ES cell lines has been tested and found to be free of *Mycoplasma* contamination.

#### **Bacterial and Fungal Contamination Test**

Each lot of Cellartis human ES cell lines has been tested and found to be free of bacterial and fungal contamination.

## **Human Viral Contamination Test**

Cellartis Human ES Cell Line 121 (SA121) has been verified to be negative for human viruses (CMV, EBV, HBV, HCV, HIV1, HIV2, HPV, HSV1, and HSV2).

(033121) Page 2 of 3

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For-Profit Entities in North America wishing to purchase this product are required to submit a completed copy of the Human ES Cell Line license agreement to US. For details please contact licensing@takarabio.com.

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(033121) Page 3 of 3