

# **Application Note**

# Panexin CD

# **Chemically Defined Serum Replacement**

Product	Description	Catalogue-No.	Size
Panexin CD	Chemically defined serum replacement for adherent and non-adherent cells	P04-93050 P04-93100 P04-930500	50 ml 100 ml 500 ml

## Application Note for Panexin CD

To ensure a successful transition, it is essential to harvest vital cells during their logarithmic growth phase. The success of the adaptation process depends on the specific cell line and culture conditions used. It is recommended to keep a backup culture in the original medium until a successful transition is accomplished.

In most cases, it is possible to achieve a direct transition from 10% FBS to 1% FBS + 9% Panexin CD. However, if acceptable growth and viability are not sustained with this mixture, it is advisable using the indirect adaptation protocol outlined in the Panexin CD datasheet. This protocol involves a stepwise reduction of FBS concentration, which has been proven to lead to successful results. To follow up after using 1% FBS + 9% Panexin CD, an adaption protocol is provided below, which can help to achieve optimal results:

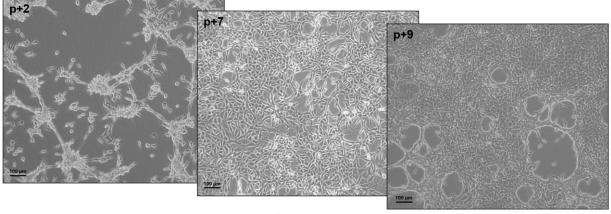
### Step 1: 1 % FBS + 9 % Panexin CD

- Seed cells at 5 x 10<sup>4</sup> 10 x 10<sup>4</sup> cells/ml (non-adherent cells), or at 5 x 10<sup>3</sup> 20 x 10<sup>3</sup> cells/cm<sup>2</sup> (adherent cells).
- Observe cells under a microscope and after reaching approximately 90 % confluency, passage cells for another 2-3 passages.
- Once normal growth is achieved, transfer cells into 10 % Panexin CD.
  Note: Working with trypsin requires inactivation with trypsin inhibitor. Instructions are provided in the corresponding trypsin inhibitor datasheet.

#### Step 2: 10% Panexin CD

- Seed cells at 5 x 10<sup>4</sup> 10 x 10<sup>4</sup> cells/ml (non-adherent cells), or at 5 x 10<sup>3</sup> 20 x 10<sup>3</sup> cells/cm<sup>2</sup> (adherent cells).
- Adherent cells: especially for early passages, cells may form aggregates and detach in case of high cell densities. To prevent this, daily observation is suggested and, if necessary, to passage cells at 70-80 % confluency using lower seeding densities.
- Changing cell morphology is a common occurrence as the number of passages increases. For sensitive cell lines, it may take up to 7-10 passages to establish a stable culture.





increasing passages

**Figure 1:** Adherent cell line L929 cultivated in DMEM + 10 % Panexin CD. The morphology of the cell line alters as the passages increase.

#### References

For cell line specific references please see our homepage (www.pan-biotech.com)

#### **Technical support**

For technical support, questions or remarks please contact your local PAN-Biotech partner or the technical department of PAN-Biotech via email (<u>info@pan-biotech.com</u>) or phone +49-8543-601630.

FOR RESEARCH USE ONLY! Not approved for human or animal diagnostic or therapeutic procedures.