

**Serum-free Cell Freezing Medium
for long-term preservation of valuable cultured cells**
Bambanker™ Direct
User's Manual

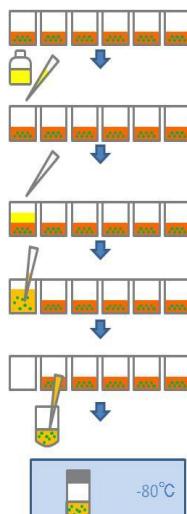
Bambanker™ Direct is a novel cell freezing medium, which can be added directly to culture medium without centrifuging the collected cells. Then after suspending the cells, you can freeze and preserve the cells in a deep freezer at -80°C. In order to meet customers' requests, this product has been modified not to require tiring preparation steps for freezing. This newly developed medium maximizes the work efficiency in your research.

[Features]

- ◆ Tiring preparation steps for freezing are not necessary. (Directly add Bambanker™ Direct to culture medium without centrifuging the cells.)
- ◆ Ready-to-use without dilution
- ◆ No programmable freezer is required.
- ◆ Rapid freezing and long-term preservation in a deep freezer at -80°C.
- ◆ Serum-free.

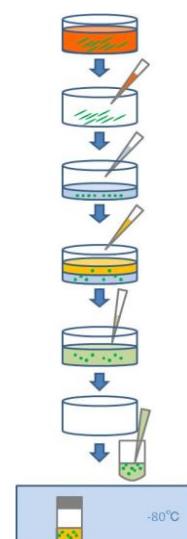
[Operating Procedure]

<Freezing of suspended cells>



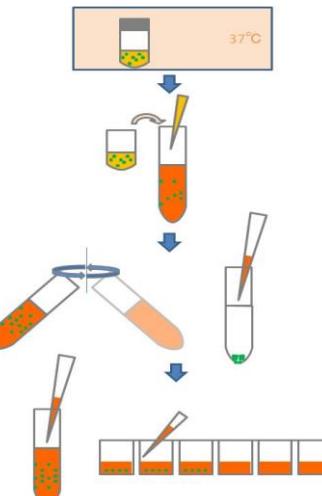
- Take out cells in a culture process from an incubator.
- Measure the same amount of Bambanker™ Direct as that of the culture medium.
- Add the Bambanker™ Direct to the cells.
- Conduct a gentle pipetting so that the culture medium and Bambanker™ Direct are uniformly mixed.
- Transfer the mixed solution to cryo-tubes for freezing and preservation.
- Freeze the cells at -80°C.

<Freezing of adherent cells>



- Take out cells in a culture process from an incubator.
- Remove the culture.
- Rinse the cells twice with PBS, and then add cell detachment solution and heat it up.
- Add the same amount of Bambanker™ Direct as that of the detachment solution.
- Conduct a gentle pipetting so that the detachment solution and Bambanker™ Direct are uniformly mixed.
- Transfer the mixed solution to cryo-tubes for freezing and preservation.
- Freeze the cells at -80°C.

<Thawing>



Rapidly thaw the cells at 37°C.

Suspend the cells in culture medium.

Centrifuge it, and then remove the supernatant.

Suspend the cells in culture medium, and then start the seeding and cell culture.

<Kit component>

Specification	Package Unit	Storage	Expiration period
Serum-free Cell Freezing Medium, containing DMSO	20mL	Keep in a cold & dark place (2 - 10°C)	Two years from manufacturing

<Sterility test>

Endotoxin: colorimetric method

Mycoplasma: Culture method

Fungi and bacteria: membrane filtration method

<Applications>

OKT4(mouse hybridoma)

HEK293(human embryonic kidney cell line)

HEK293T(human embryonic kidney cell line)

HeLa(human uterine cervical cancer cell line)

K562(human chronic myeloid leukemia cell line)

C2C12(Mouse skeletal muscle cell line)

PC12(rat adrenal medulla tumor cell line)

<Precautions>

- ◆ **Do not use this product for human body.**
- ◆ **Use only for research purposes.**
- ◆ This product contains bovine serum-derived compounds.
- ◆ Perform a confirmation test on the cells under study before actually using the medium.
- ◆ The manufacturer is not responsible for any accident or damage caused by the use of this product.
- ◆ If you have any question on the use of this product, please contact the local distributor.

Manufactured by:GC LYMPHOTEC Inc.

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貴重な培養細胞を長期間凍結保存する 血清不含細胞凍結保存液

パンパンカー[®] Direct 使用説明書

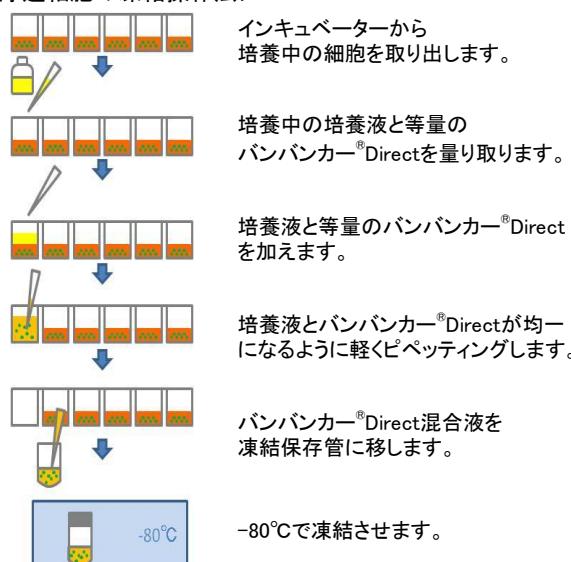
細胞を遠心分離することなく、本品をそのまま培養液に加えて細胞を懸濁後、即ディープフリーザー(-80°C)で保存できる新しいタイプの保存液です。お客様からのご要望に応え、面倒な凍結のための前処理を必要としないように改良致しました。この進化した細胞凍結保存液は、作業効率を最大限にし、効果的な研究を可能にします

【特長】

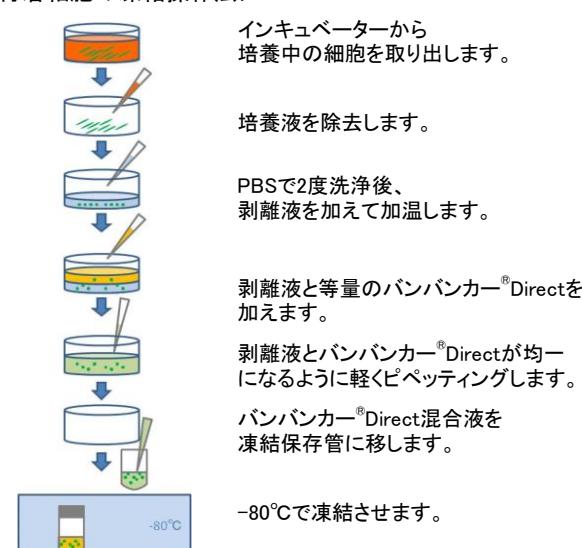
- ◆ 面倒な凍結のための前処理が不要です。
(細胞を遠心分離することなく、培養液に加えるだけ)
- ◆ 保存液の調製が不要です。希釈せず使用できます。
- ◆ プログラムフリーザーが不要です。
- ◆ 凍結細胞は、ディープフリーザー(-80°C)で急速かつ長期間凍結保存ができます。
- ◆ 血清を含みません。

【操作法】

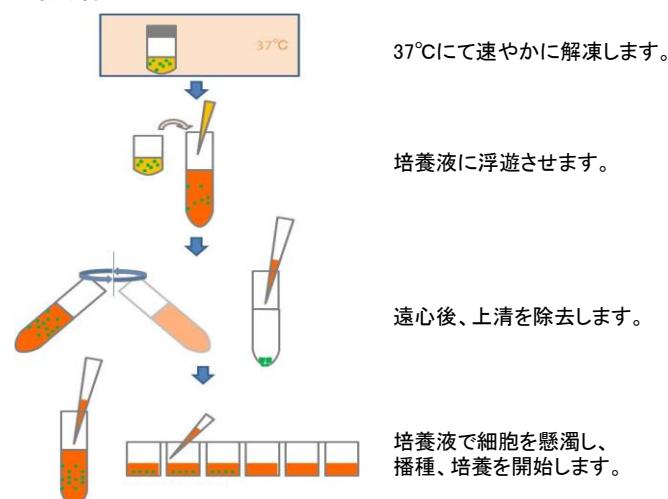
＜浮遊細胞の凍結操作法＞



＜付着細胞の凍結操作法＞



＜解凍操作法＞



【キット内容】

仕様	包装単位	貯法	有効期間
DMSO含有 血清不含	20mL	冷暗所保存 (2~10°C)	製造後2年

【無菌検査】

エンドトキシン：比色法
マイコプラズマ：培養法
真菌、細菌：カンテン平板表面塗抹法

【使用例】

OKT4(マウスハイブリドーマ)、HEK293(ヒト胎児腎細胞株)、HEK293T(ヒト胎児腎細胞株)、HeLa(ヒト子宮頸がん細胞株)、K562(ヒト慢性骨髓性白血病細胞株)、C2C12(マウス骨格筋細胞株)、PC12(ラット副腎髓質腫細胞株)

【注意】

- ◆ 人体には使用できません。
- ◆ 研究用以外の目的で使用しないでください。
- ◆ ウシ血清由来の化合物を含みます。
- ◆ ご使用前に、目的の細胞で確認試験を行なってください。
- ◆ 当社は、本製品の使用に起因する事故や損害についての責任を負いかねます。
- ◆ 使用に際しご不明な点はお問い合わせください。

製造元：株式会社GCリンフォテック

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