

# VECELL 6well Plate Trial Set (BK), VECELL 24well Plate Trial Set (BK)

Cat. No.	PVHG6WB-3-EX	3 kinds of 6-Well Plates
	PVHG24WB-3-EX	3 kinds of 24-Well Plates

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## Directions for Use

Thank you for your interest in our product, VECCELL<sup>®</sup> plates. This set contains 3 kinds of VECCELL plates, 1 Preset VECCELL, 1 G-Plate and 1 H-plate. Please try all the types of the plates and find which one would be suitable for your cell-culturing research work. Please be sure to carefully read and follow the directions below before use.

Here is the direction for **Preset VECCELL**:

1. Do not use beyond the expiration date on the label. Gas-Permeable VECCELL<sup>®</sup> Plate has been sterilized with EO gas, and can be used for 3 years from the date denoted by the Lot Number (for example, Lot. no 120810 refers to 2012/08/10.) Please avoid direct sunlight, hot and humid, and please store at room temperature.
2. Remove and discard the plastic sheet in order to fix the inserts into plate.
3. VECCELL<sup>®</sup> Inserts are already set in the well plate. Add culture medium (0.2-0.4 ml for ø12 insert, and 0.8-1.0 ml for ø30 insert) to the filter plate well, allowing the whole surface area of the membrane to become wet and transparent. Then, add medium to the receiver wells (0.5-0.7 ml for ø12 insert, and about 1 ml for ø30 insert). Well volumes are 50  $\mu$  l to 250  $\mu$  l.
4. The VECCELL<sup>®</sup> membrane is not transparent under dry conditions, but becomes transparent under wet conditions. If the membrane does not become transparent, place Preset VECCELL<sup>®</sup> in an incubator at 36° C for about ten minutes. Then, pipette the appropriate cell dispersed medium and seed cells directly onto the VECCELL<sup>®</sup> membrane. Cultured cells on the VECCELL<sup>®</sup> membrane can be observed under a normal phase contrast microscope.
5. Remove any bubbles present below the membrane, as they may negatively affect cell culture.
6. One of the merits of the VECCELL<sup>®</sup> Plate is in vivo-like morphology and behavior for more realistic cell biology and function. Cell shape on the membrane is not expanded, thereby increasing cell density by 20-60%. Cell seeding density ranges from 20,000 to 80,000 cells/well, depending on the cell line and experimental conditions. Medium change should be done after 24hrs of seeding on VECCELL<sup>®</sup> Plate, because cell attaching to the Plate becomes stable after 24hrs.

7. Membranes do not contain fluorescent substances, and cells on the membranes can thus be observed by fluorescence microscopy.
8. The VECELL® membrane is very thin (about 50  $\mu$  m) and so should not be touched directly with pipettes. VECELL® membrane is already coated with cell-adhesive materials.
9. Subculture using VECELL® Plate. For subculture, it is recommended to use normal trypsin treatment. Within 5 days of culture, the cell recovery rate is almost the same as that with a normal plastic plate. However, after one week of culture, the recovery rate becomes lower than with a normal plastic plate, due to ECM (extra cellular matrix) production and tissue formation in the VECELL® membrane. The VECELL® Plate is therefore good for long-term cell culture observation.
10. The VECELL® membrane is very stable, and can be treated in alkaline solutions or organic solvents for DNA extraction, etc.

Cell forms that are almost the same as in vivo can be seen on the VECELL membrane.

Here is the direction for **VECELL® G Plate**:

The membrane of VECELL® G-Plate is a gas permeable membrane. The external dimensions of 96well and 384 well plates conform to the recommendations of ANSI/SLAS Microplate Standards (ANSI/SLAS 1 to 4 – 2004). Materials of the plate framework is polystyrene (PS), except 384 well plate Cyclic Olefin Copolymer(COC).

1. Do not use beyond the expiration date on the label. The VECELL®G-Plate has been sterilized with EOG, and can be used for 3 years from the date denoted by the Lot Number (for example, Lot : 150202 refers to 2015/02/02). Please avoid direct sunlight, hot and humid, and please store at room temperature.
2. As for recommended medium amount of each well, please refer to the table below. Please change this medium amount at your experiment conditions.

Recommended Medium Amount

Plate type	Medium amount
6well Plate	2000 ~ 3000 $\mu$ L
24well Plate	500 ~ 900 $\mu$ L
96well Plate	100 ~ 250 $\mu$ L
384well Plate	30 ~ 60 $\mu$ L

3. The membrane of the VECELL® G-Plate is thin (about 300  $\mu$ m) and coated with extra cellular matrix (ECM: collagen) and synthetic amphiphilic polymer which functions as a cell adhesive.
4. Medium change should be done after 24hrs of seeding on VECELL® G-Plate, because cell attaching to the Plate becomes stable after 24hrs.
5. Membranes do not contain fluorescent substances, and cells on the membranes can be observed by fluorescence microscopy.
6. The membrane of the VECELL® G-Plate can be treated in alkaline solution for DNA extraction and also used with organic solvents, including ethanol, phenol and 80%DMSO. If you have any questions about the VECELL® G-Plate, please do not hesitate to contact Cosmobio Co., LTD.

## Here is the direction for **VECELL® H-plate**

The membrane of H-plate is a Hybrid membrane of the porous membrane (ePTFE) and the gas permeable membrane. The external dimensions of 96well and 384 well plates conform to the recommendations of ANSI/SLAS Microplate Standards (ANSI/SLAS 1 to 4 – 2004). Materials of the plate framework is polystyrene (PS), except 384 well plate Cyclic Olefin Copolymer(COC).

1. Do not use beyond the expiration date on the label. The VECELL®H-Plate has been sterilized with EOG, and can be used for 3 years from the date denoted by the Lot Number.
2. The VECELL®H-Plate will be transparent after the addition of medium. Its membrane is not transparent under dry conditions, but becomes transparent under wet conditions. Next, pipette the appropriate cell dispersed medium and seed cells directly onto the wet VECELL® H-Plate membrane. Cultured cells on the VECELL membrane can be observed under a normal phase contrast microscope. As for recommended medium amount of each well, please refer to the table below. Please change this medium amount at your experiment conditions.

Recommended Medium Amount

Plate type	Medium amount
6well Plate	2000 ~ 3000 µL
24well Plate	500 ~ 900 µL
96well Plate	100 ~ 250 µL
384well Plate	30 ~ 60 µL

3. One of the merits of the VECELL®H-Plate is in vivo-like cell morphology and behavior for more realistic cell biology and function. Cell shape on the membrane is not expanded, thereby increasing cell density by 20 ~ 60%. Please decide cell seeding density depending on experimental conditions.
4. Medium change should be done after 24hrs of seeding on VECELL® H-Plate, because cell attaching to the Plate becomes stable after 24hrs.
5. The VECELL®H-Plate membrane is not transparent under dry conditions, but becomes transparent under wet conditions. Cultured cells on the VECELL®H-Plate membrane can be observed under a normal phase contrast microscope. The VECELL®H- Plate membrane has strength enough for the experiment. But it is very thin. Do not touch membranes directly with pipettes.
6. Membranes do not contain fluorescent substances, and cells on the membranes can be observed by fluorescence microscopy.
7. The VECELL®H-Plate membrane is already coated with cell-adhesive material. Subculture using the VECELL®H-Plate. For subculture, it is recommended to use normal trypsin treatment. Within 4 days of culture, the cell recovery rate is almost the same as that with a normal plastic plate. However, after one week of culture, the recovery rate becomes lower than with a normal plastic plate, due to ECM (extra cellular matrix) production and tissue formation into the VECELL®H-Plate membrane. If not cell recovery, a cell culture can be extended to long-term cell.
8. The membrane of the VECELL®H-Plate can be treated in alkaline solution for DNA extraction and also used with organic solvents, including ethanol, phenol and 80%DMSO.



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