Preservation Plates

Microbial Preservation Plate

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Preservation Plate

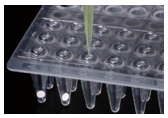
Microorganisms and DNA can be preserved in a dry state!
A new style of sample preservation.

Space Saving

It is very compact and space saving in comparison with preserving in tubes samples of liquid condition.
Marking space on the plate and compact body make sample storage management easier.

Recover Samples Directly on PCR Plate

Paper chips can be put directly into the solution to start PCR or in situ hybridization.



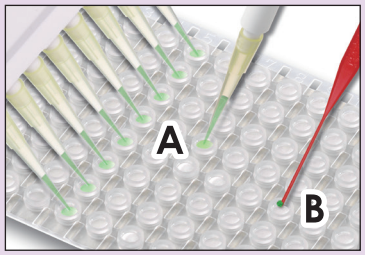
Reduce Contamination Risk

Compared to the traditional way of repeated samplings from the same tube, Preservation Plate (PVP) can reduce contamination risk by using different wells on the PVP and/or changing the PVP sheet itself dependent on the sample (Note: Only 96 well PVP can be cut easily with scissors).

Select a preservation plate according to the sample type

Because a protective agent is applied to the paper chips of the "Microbial Preservation Plate", it is very suitable for desiccation of bacteria and yeast. In addition, the paper chips used in "Preservation Plate" which can preserve nucleic acid and blood, do not contain any reagents and salt. Thus, you can later use any desired solution.

Preservation Method

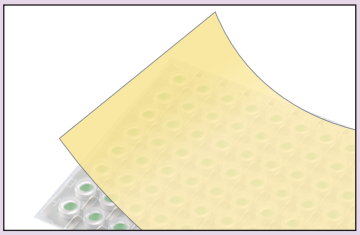


①Let the paper chip absorb a liquid sample.
A: For a liquid sample
- Solution volume per well
  96 well → 5 µL
  3 well → 50 µL
  1 well → 200 µL

B: For a sample from agar

②Dry the sample.
- Recommended dry time
  96 well → 60 minutes or more
  3 well, 1 well → 90 minutes or more

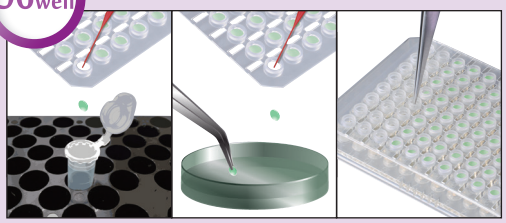
③Seal the plate with the protection seal and store it in room temperature.



Recovery Method

①Peel off the protection seal and place the paper chip into a container.

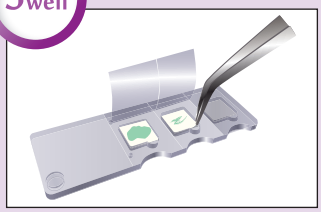
96well



Push the paper chips by tweezers etc.

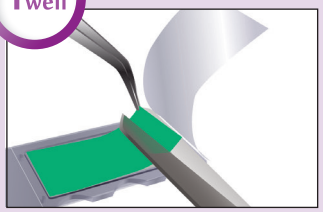
3well

Pick up the paper chip with tweezer.

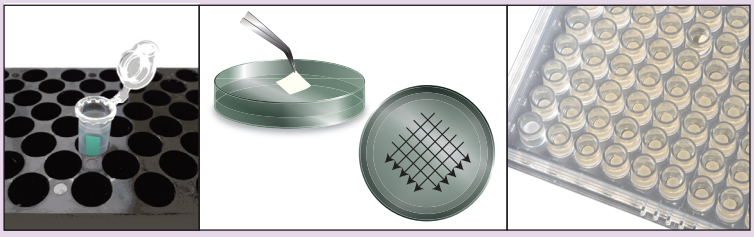


1well

Cut out the necessary size of paper chip.



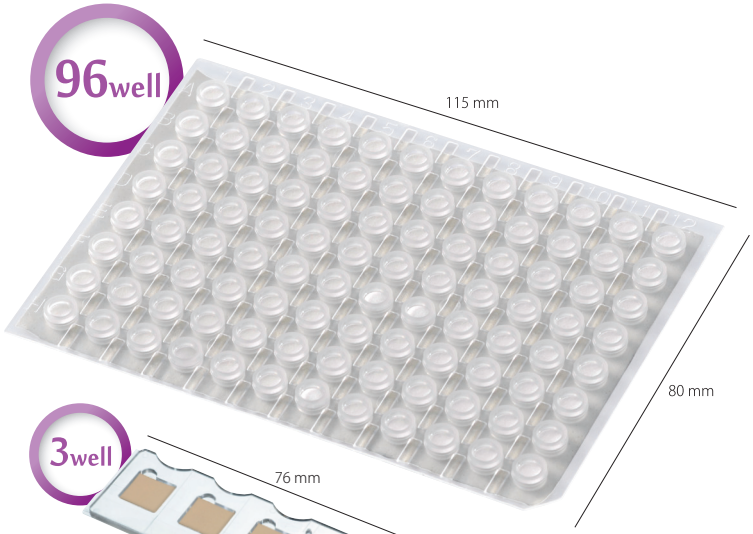
②Put the solution into the container and stir.
In the case of agar, rub the paper chip onto agar.

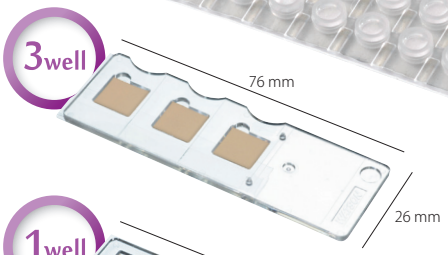


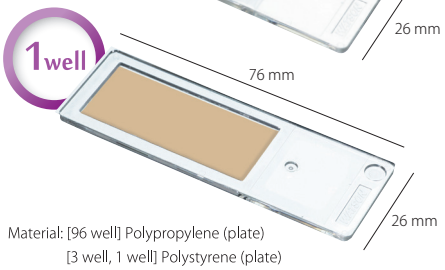
Note : When handling the specific pathogens, please act in accordance with the applicable laws and regulations in your country.

Microbial Preservation Plate

For general bacteria / For yeast







Material: [96 well] Polypropylene (plate)
[3 well, 1 well] Polystyrene (plate)

Microbial strains such as *E.coli* and yeast can be dry-preserved on a paper chip coated with a preservation agent.
Samples can be sealed individually with an accessory protection seal to prevent contamination and inactivation.
This enables compact and efficient preservation at room temperature - it is no longer necessary to use deep freeze or dry ice for transportation.

Note : When handling the specific pathogens, please act in accordance with the applicable laws and regulations in your country.

Sterilized

Expiry Date

[Cautions of storage]
This item has an expiry date.
Please check this "Expiry Date" indicated on the products label.

Cat. No.	Item		Unit
176-531S	Microbial Preservation Plate for Bacteria, 96 well	Sterilized	5 plates / bag
176-551S	Microbial Preservation Plate for Fungi, 96 well	Sterilized	5 plates / bag
176-331S	Microbial Preservation Plate for Bacteria, 3 well	Sterilized	5 plates / unit
176-351S	Microbial Preservation Plate for Fungi, 3 well	Sterilized	5 plates / unit
176-231S	Microbial Preservation Plate for Bacteria, 1 well	Sterilized	5 plates / unit
176-251S	Microbial Preservation Plate for Fungi, 1 well	Sterilized	5 plates / unit

■ Microbial viability with time in Preservation Plate

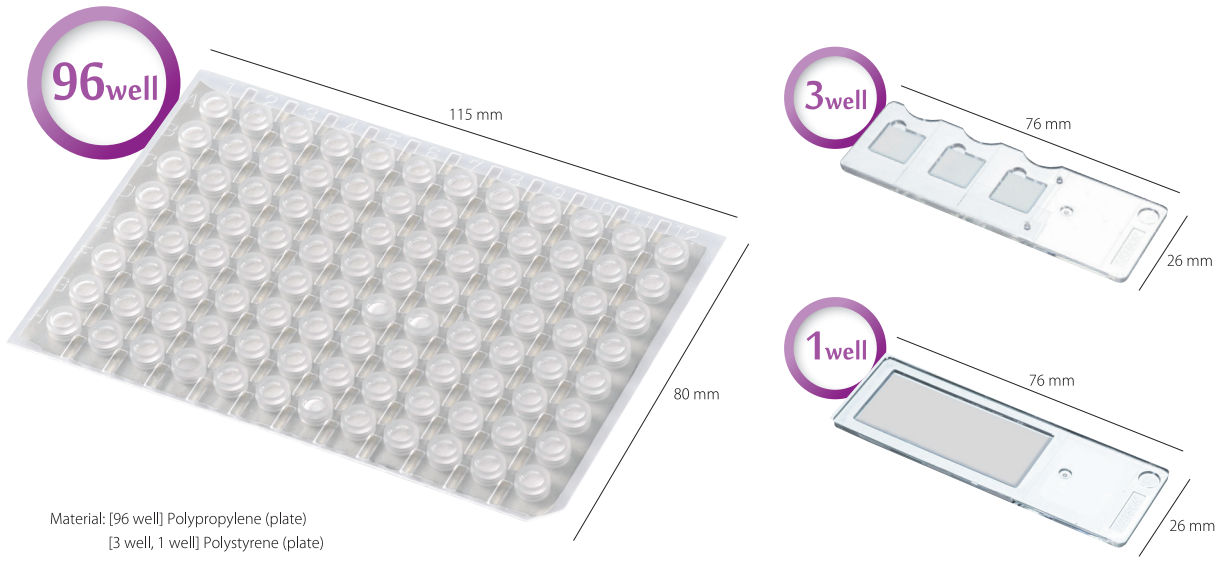
No.	Kingdom	Genus Species	Time(month)	0.5				3				6				12				24			
			JCM No.	−20℃	4℃	RT	37℃	−20℃	4℃	RT	37℃	−20℃	4℃	RT	37℃	−20℃	4℃	RT	37℃	−20℃	4℃	RT	37℃
1	True Bacteria	*Deinococcus grandis*	6269	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	×	○	○	×	×
2		*Chryseobacterium meningosepticum*	21065	○	○	○	○	○	○	×	×	○	×	×	×	○	×	×	×	○	×	×	×
3		*Flavobacterium aquatile*	20475	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
4		*Sphingobacterium multivorum*	21156	○	○	×	×	○	×	×	×	○	×	×	×	○	×	×	×	○	×	×	×
5		*Sphingomonas paucimobilis*	7156	○	○	○	○	○	○	×	×	○	○	×	×	○	○	×	×	○	○	×	×
6		*Methylobacterium extorquens*	2802	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	×	○	○	○	×
7		*Alcaligenes faecalis*	20522	○	○	○	○	○	○	×	×	○	○	×	×	○	○	×	×	○	○	×	×
8		*Comamonas testosteroni*	5832	○	○	×	×	○	○	×	×	×	×	×	×	×	×	×	×	×	×	×	×
9		*Delftia acidovorans*	5833	○	×	×	×	○	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
10		*Herbaspirillum seropedicae*	21448	○	○	○	○	○	○	×	×	○	×	×	×	○	×	×	×	×	×	×	×
11		*Halomonas halophila*	20791	○	○	×	×	○	×	×	×	○	×	×	×	○	×	×	×	○	×	×	×
12		*Pseudomonas aeruginosa*	5962	○	○	○	○	○	○	×	×	○	○	×	×	○	○	×	×	×	×	×	×
13		*Azotobacter vinelandii*	21475	○	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
14		*Pseudoalteromonas carrageenovora*	8851	○	○	○	○	○	×	×	×	○	×	×	×	○	×	×	×	○	×	×	×
15		*Shewanella putrefaciens*	20190	○	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
16		*Vibrio proteolyticus*	21193	○	○	○	○	○	○	○	○	○	○	×	×	○	○	×	×	×	×	×	×
17		*Escherichia coli*	1649	○	○	○	○	○	○	×	×	○	○	×	×	○	○	×	×	○	×	×	×
18		*Enterobacter aerogenes*	1235	○	○	○	○	○	○	×	×	○	○	×	×	○	○	×	×	○	×	×	×
19		*Bacillus subtilis*	1465	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
20		*Planococcus citreus*	2532	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	×	○	○	×	×
21		*Lactobacillus delbrueckii subsp. delbrueckii*	1012	○	○	○	○	○	○	○	×	○	○	○	×	○	○	×	×	○	○	×	×
22		*Arthrobacter globiformis*	1332	○	○	○	○	○	○	×	×	○	○	×	×	○	○	×	×	○	○	×	×
23		*Micrococcus luteus*	1464	○	○	○	○	○	○	○	○	○	○	×	×	○	○	×	×	○	○	×	×
24		*Brevibacterium linens*	1327	○	○	○	○	○	○	×	×	○	○	×	×	○	○	×	×	○	○	×	×
25		*Corynebacterium glutamicum*	1318	○	○	○	○	○	○	○	×	○	○	×	×	○	○	×	×	○	×	×	×
26		*Microbacterium lacticum*	1379	○	○	○	○	○	○	×	×	○	○	×	×	○	○	×	×	○	○	×	×
27		*Rhodococcus equi*	1311	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	×	○	○	×	×
28	Fungi	*Saccharomyces cerevisiae*	7255	○	○	○	○	○	○	×	×	○	×	×	×	○	×	×	×	○	×	×	×
29		*Schizosaccharomyces pombe*	21877	○	○	○	○	○	○	○	○	○	○	○	×	○	○	○	×	○	○	○	×

*The above data are as of 1st May, 2013 and may be subject to update in the future.
*2 types of preservation agent of different formulation are used for bacteria and yeast are used in the above experiments.
*The above data are extracted from our own experiments and not to gurantee the results in other experiments. Return or exchange of the products caused by the result of preservation are not acceptable.

Preservation Plate

For DNA, RNA, oligonucleotide, or blood

Watson's Preservation Plate (PVP) has been developed in order to enable storage and transportation of such bioresources as nucleic acids (DNA / RNA / oligonucleotide) and blood under room temperature and pressure.
Simply place such samples onto paper chips, then dry, the preservation is completed.



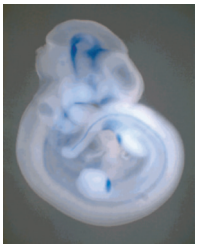
Material: [96 well] Polypropylene (plate)
[3 well, 1 well] Polystyrene (plate)

Cat. No.	Item	Unit
176-501C	Preservation Plate, 96 well, Cellulose	5 plates / bag
176-502C	Preservation Plate, 96 well, Nylon	5 plates / bag
176-301C	Preservation Plate, 3 well, Cellulose	10 plates / unit
176-302C	Preservation Plate, 3 well, Nylon	10 plates / unit
176-201C	Preservation Plate, 1 well, Cellulose	10 plates / unit
176-202C	Preservation Plate, 1 well, Nylon	10 plates / unit

Application Examples

●Preservation of oligo-synthesis RNA probe and ISH (ISH: in situ hybridization)

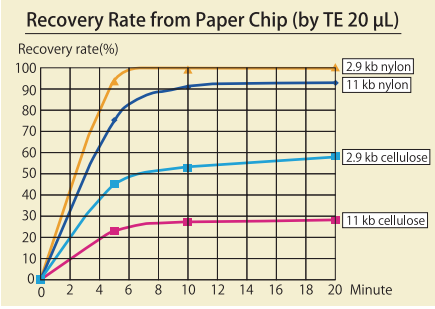
After a week of preservation under room temperature.



After 4 months of preservation under room temperature.

There is always a risk of contamination with RNase based on operator error which may influence the outcome of your experiment. By using PVP and storing a suitable amount of sample for each ISH experiment, the samples remain in the same condition. The preservation period is more than 4 months under room temperature.

●DNA Preservation and Sequence Analysis



Target DNA can be preserved and used for analysis later.
PVP with nylon paper chips is recommended for samples with long molecular chains like genomic DNA or high value samples. After sufficient drying, it is possible to preserve samples for several months. (Preservation period may vary depending on the level of purification.)