



# Happy Cell® ASM Inactivation Solution – How to Harvest Micro Tissues and Cells from Happy Cell® ASM

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## Product Information & User Guide

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### About Happy Cell® ASM Inactivation Solution

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Happy Cell® ASM Inactivation Solution is a liquid reagent used in conjunction with Happy Cell® ASM. It facilitates the recovery of 3D multi-cellular structures by irreversibly disrupting the Happy Cell® ASM suspension polymer complex. Studies have shown that Happy Cell® ASM Inactivation Solution does not negatively impact cell viability, even at several times the recommended concentration.

**Catalogue Number:** VHCIS

### Components

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- 2 x 1.25 mL vials of Inactivation Solution (5 mg/mL)

### Additional Items Required

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- Micropipettes
- A 37°C cell culture incubator

### Storage and Expiry

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Stable until expiry date on bottle if stored at 2-8°C. DO NOT FREEZE.



Ship at ambient temperature.



## Preparation and Use

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Happy Cell® ASM Inactivation Solution is supplied as 5000µg/mL concentrated stock solution.

It can be diluted in sterile Phosphate Buffered Saline (PBS) or a base media of choice if volume adjustment is required. When diluted Happy Cell® ASM is stable until the product expiry date on the packaging.

Once inactivation has taken place cellular material may be harvested by either:

- using a pipette
- treated in situ as required.

Depending on the end point of your assay you may inactivate Happy Cell® ASM in the vessel in which you cultured your cells, or to transfer structures to a more appropriate culture vessel.

## Notes

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1. High quality imaging requires the culture vessel to be manufactured from imaging grade material and to have a flat bottom.
2. If you have cultured your cells in a bioreactor tube you may wish to transfer your cells to a microplate that meets the above requirements prior to inactivation. To do this simply transfer cells to the microplate in question using a pipette and treat with inactivation solution as outlined in Figure 1. - Harvesting material using Happy Cell® ASM Inactivation Solution. (Below)
3. Cellular material can be easily imaged through Happy Cell® ASM and labelled as you would with any non-adherent cell cultures.
4. For analytical procedures requiring a cell pellet, such as mass spectrometry and those involving electrophoresis, wash the samples three times by centrifugation/re-suspension in PBS. This procedure is best carried out in either a centrifuge or Bioreactor tubes.
5. Use a small sample of Happy Cell® ASM Inactivation Solution as an internal control sample in your analytical experiments.



## Steps

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1. Add Inactivation Solution to Happy Cell® ASM cell suspension to give a final concentration of as shown in example table below.
2. Gently mix to ensure that Happy Cell® ASM Inactivation Solution is fully dispersed.
3. Incubate cell suspension at 37°C for up to 60 minutes
4. After the recommended incubation time has elapsed observe cell suspension and confirm that cellular material has descended to the bottom of the culture vessel.
5. If required centrifuge culture from 20-150g depending on application. **For isolation of structurally intact spheroids/micro tissues for further culture we recommend applying lower g forces (this step may require a little trial and error).**

If required, the cell culture can be returned to incubation for a longer, indefinite, period of time.

Volume of culture media in micro well or culture vessel	Happy Cell ASM final dilution	Amount of inactivation solution to be added.
1ml	1X	0.025 ml.
1ml	2X	0.05 ml.
1ml	3X	0.75 ml.
1ml	4X	0.1 ml.

Inactivation solution preparation guide showing amount of inactivation solution required in 1ml volumes at concentrations ranging from 1X – 4X.

Volumes can also be calculated using the “Happy Cell® ASM Quick Calculator”.

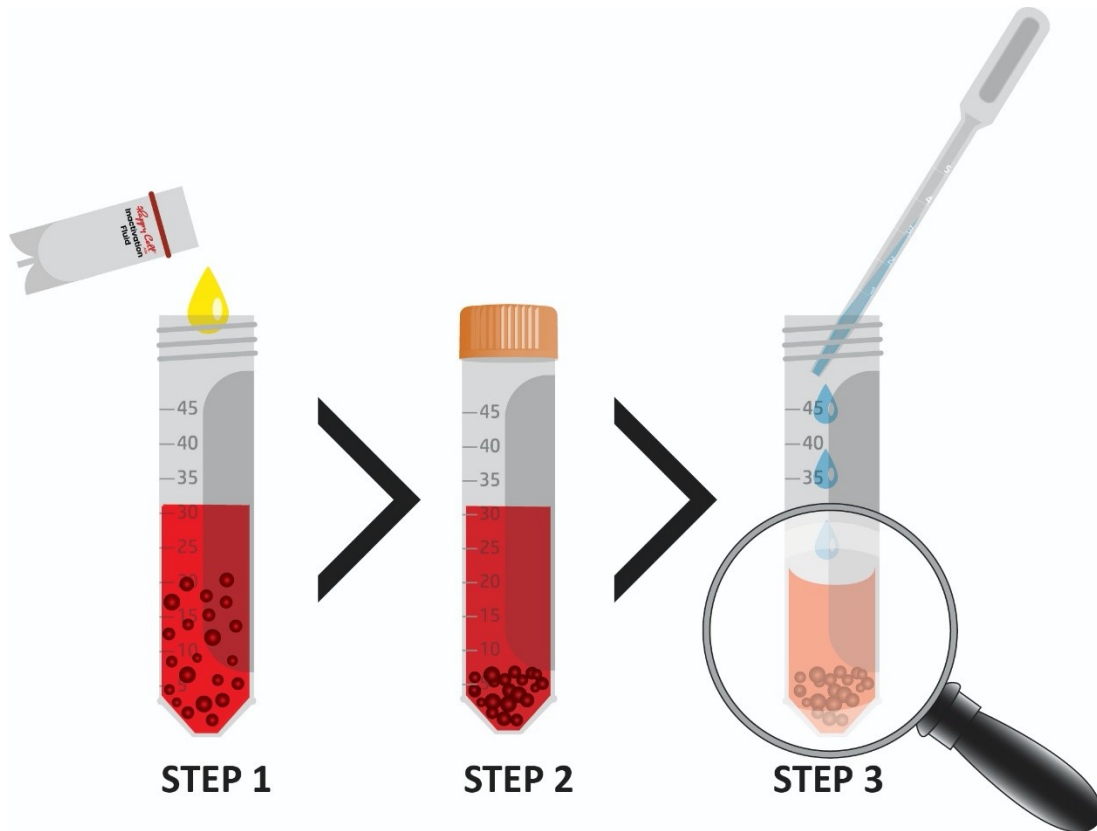


Figure 1. Harvesting cellular material using Happy Cell<sup>®</sup> ASM Inactivation Solution.

### Step 1

When your cultures are ready to harvest isolate cellular material by using Happy Cell<sup>®</sup> ASM Inactivation Solution.

### Step 2

Incubate at 37°C for up to 60 mins

### Step 3

When Cell Suspension has sedimented to the bottom of the Culture Vessel harvest, process and analyse as required.



## Safety warnings and precautions

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For research use only.

Not recommended or intended for diagnosis of disease in humans or animals.

Do not use internally or externally in humans or animals.

All chemicals should be considered as potentially hazardous. We therefore recommend this product be handled only by persons trained in laboratory techniques and that it is used in accordance with the principles of good laboratory practice. Wear suitable protective clothing such as laboratory overalls, safety glasses and gloves. Care should be taken to avoid contact with skin or eyes. In the case of contact with skin or eyes wash immediately with water. See material safety data sheet(s) and/or safety statement(s) for specific advice.