



Stampwell

Questions & Answers

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1. WHY SHOULD I USE STAMPWELL?

Q/ What are the benefits of using Stampwell for 3D sample imaging?

Stampwell provides a cheap and easy method to facilitate imaging of 3D samples. The well designs have been optimized to keep your samples immobilized while imaging, changing media or moving the plate around. Where stamp designs contain large amounts of wells, a numbering system allows you to keep track of your samples for long-term imaging.

Q/ What are the benefits of using Stampwell for growing spheroids/organoids?

The V-shape Stampwells have been designed for growing and imaging 3D cellular structures such as spheroids or organoids. Loading them on Stampwells allows to keep them individually separated but not isolated. This prevents them from sticking together while preserving a good viability by maintaining communication between samples.

2. FINDING THE RIGHT DESIGN

Q/ What should I use the V-shape 300 μ stamp for?

This shape is perfect for growing and imaging your medium-sized rounded 3D objects such as medium-size spheroids and organoids. If you need to work on bigger objects, you might use the V-shape 500 μ .

Q/ What should I use the V-shape 500 μ stamp for?

This shape is perfect for growing and imaging your large size rounded 3D objects such as big spheroids and organoids. If you need to work on smaller objects, you might use the V-shape 300 μ .

Q/ What should I use the Embryo 1 stamp for?

This small rectangular shape (2*0.65mm) is perfect for imaging your early-stage zebrafish embryos at 1 day post fertilization (DPF).

Q/ What should I use the Embryo 2 stamp for?

This particular “drop-like” shape is designed for imaging embryos lying on their side. Their 3.90mm length makes them particularly well-suited for zebrafish embryos up to 2 DPF, or medaka larvae at a hatching stage.

Q/ What should I use the Larvae 1 stamp for?

This Stampwell design was made for ventral positioning and imaging of zebrafishes at various development stages (3 to 14 DPF). Composed of a body and a tail part, the wells perfectly fit the body shape of larvae and is therefore a good way to ensure they remain positioned correctly under the microscope. One Larvae 1 stamp contains wells of 3 different lengths (4, 5 or 6mm) and thus allows imaging multiple development stages in parallel (for example, 3 to 14 DPF for zebrafishes or stages 39 to 41 for medaka).

Q/ What should I use the Larvae 2 stamp for?

This Stampwell, composed of large prisms of 3mm and 10mm, was designed as an ergonomic solution for imaging late-stage zebrafishes and medaka larvae (up to 20 DPF for zebrafishes or up to stage 42 for medaka).

Q/ How to make sure that my samples fit the wells?

Please [contact us](#), we will be happy to provide you advice on the best shapes to match your needs.

3. STAMPWELL APPLICATIONS

Q/ Which microscopes are compatible with Stampwell?

You can use any kind of microscope (inverted, upright, with/without deeping lens, confocal, spinning disk, two-photon excited, stereomicroscope, macroconfocal, videomicroscope, ...). The only parameters that matter are the objective field of view and its numerical aperture / working distance.

Q/ Which culture plate formats are compatible with Stampwell?

The stamps are fully compatible with 35 mm dishes and optimized for that format. They may also be used with larger formats, such as 6-well plates.

Q/ Can I image fixed and live samples with Stampwell?

Both. Stampwell can be used in sterile conditions when working on live samples, but you can also mount and fix your samples directly in the wells.

4. PROTOCOL OF USE

Q/ What kind of tools do I need to use Stampwell?

All you need is:

- hydrogel (agarose, alginate, phytigel, methylcellulose ...),
- a 35 mm petri dish, with or without glass bottom,
- a pipetman or pasteur pipette to load your samples in the wells
- an imaging system (ideally a stereomicroscope)

Q/ How long will it take to make the wells?

To make the wells, you only need to melt your hydrogel, apply the stamp and remove it once reticulated. This process should take no more than 20 minutes.

Q/ Can I use my Stampwell several times?

Stampwells can be used dozens of times as long as they are properly washed and sterilized between experiments.

Q&A updated on February 27th, 2023