



User Guide



CONTEXT

The Precellys Emulsion Kit provides a simple, reliable, and rapid method to generate injectable antigen or antibody emulsions in the context of immunological research. The Precellys Emulsion kit is based on the use of specifically designed tubes for Precellys Evolution and Minilys homogenizers. The use of these tubes, combined with the power of Precellys homogenizers, ensures the obtention of a perfect emulsion. This process provides efficiency and reproducibility in the generation of the emulsion. The Precellys Emulsion device, in which the emulsion is made, is designed to ensure compatibility with the injection syringe. The transfer from the Precellys Emulsion device to the syringe is, therefore, very easy to operate and allows a transfer without loss of material and without altering the emulsion. This allows reagent savings. Emulsions can also be kept at +4°C for 4 weeks if not used completely.

PRECELLYS EMULSION KIT

CAT# D34200.10 EA



KIT CONTENT

- Each kit pack cat# D34200.10 contains 10 emulsion devices.
- Each emulsion device is composed of the tube + cap allowing to generate the emulsion, and a specific plunger to transfer the emulsion from the tube to the syringe used for the final injection of the emulsion.
- Each emulsion tube and plunger are autoclaved and placed in a hermetic package.



MATERIAL

The use of the Precellys Emulsion kit requires

- Centrifuge
- Ice bucket with ice
- Pipettes
- Precellys Evolution of Minilys homogenizer
- Cold PBS without Ca²⁺ or Mg²⁺
- Freund's adjuvant complete or incomplete, Montanide, or another adjuvant used for emulsion
- Syringes, we recommend to use Injekt®-F 1 ml, B.Braun cat# 9166017V



PROCEDURE

- Before starting, all material and reagents must be placed on ice
- Open the Emulsion tube
- Add buffer, antigen and then the adjuvant to the tube (max 8 ml, enough for 7 x 1ml Braun syringes)
- Close the tube with the cap
- Mix the reagents by inverting the tube and then by shaking the tube vigorously for about 10 sec
- Place the tube in the Precellys Evolution or Minilys
- Run the following protocol on the instrument:
 - **Minilys:** 5000 rpm for 1 min; **Precellys Evolution:** 8000 rpm for 1 min
- Once the run is finished, remove the tube from the instrument and place it on ice for 3 min
- Repeat the run on the instrument following the same protocol:
 - **Minilys:** 5000 rpm for 1 min; **Precellys Evolution:** 8000 rpm for 1 min
- Centrifuge the tube at 300xg for 1 min to remove the air bubbles and compact the emulsion
- Take the tube and remove the cap
- Insert the specific plunger in the tube and push it until it reaches the emulsion
- Remove the snap-off device by twisting the closure at the bottom of the tube
- Take the injection syringe and remove its plunger
- Attach the syringe equipped with a needle (preferably 25 gauge) to the dedicated lock at the bottom of the Emulsion tube
- Transfer the emulsion from the Emulsion tube to the syringe by pushing on the plunger
- gently. To avoid emulsion loss, stop at the 0,15 graduation of the syringe that corresponds to 1mL transferred in the final injection syringe
- Separate the injection syringe from the emulsion tube
- Insert the plunger into the injection syringe and push it in until the emulsion comes out of the needle
- Repeat the operation for the rest of the emulsion present in the emulsion tube.
- Inject the emulsion to the animal model or store the syringe containing the emulsion in the fridge (+4°C for up to 4 weeks)