

Carrageenan air pouch (mice)

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Abstract

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Guidelines

To ensure a better performance, use cold PBS 1x (4C) and room temperature 1% carrageenan

Before start

Use the solution of 1% carrageenan fresh (prepare right before the laboratory procedure)

Materials

- Carrageenan C1867 by [Sigma-aldrich](#)
- ✓ 21G Needles 4657527 by Contributed by users
- ✓ 30G Needles 4656300 by Contributed by users
- ✓ PBS 1X by Contributed by users
- Sterile Filter 0.22um by [Corning](#)
- ✓ Advia 120 Hemocitometer by Contributed by users
- ✓ Heparina 654754.0 by Contributed by users

Protocol

1- Day 0: Inflate the pouch. To anesthetize the mice, open the O2 bottle and place the O2 pressure between 0.5 and 1 and the isoflurane in 4. Place paper in the methacrylate box to anesthetize the mice, and under the nozzle in the that we placed the mouse. Open the red stopcock to get O2 and isoflurane to the box and put the mouse. After sleeping, place the mouse on the table, with the head on the nozzle, make sure the nozzle stopcock is open and lower the isoflurane pressure to 2. We can go to the next mouse in the box. Using a 10 ml syringe, a 0.22 μ m filter and a 30G needle, we infuse 3 ml of sterile air into the back of the mouse. Remove the needle from the pouch by turning it so that

the air does not escape. It is preferable to form the pouch something close to the head, so that the mouse does not bite it.

Step 1.

2- Day 3: Reinforcing the pouch. Refill the pouch in the manner explained above: 3ml of sterile air

Step 2.

3- Day 6: Carrageenan Injection. We dissolve 1% Carrageenan (λ -Carrageenan Sigma-Aldrich) in 1X PBS. (eg 0.03g of carrageenan and 3ml of PBS). Carrageenan takes time to dissolve completely. We heat a bath at 80 ° C, give it vortex, and so on until it dissolves completely. Fresh carrageenan should be used. With the 30G needle we puncture 0.5 ml of carrageenan in the pouch while massaging the area. Once injected, massage for 30s.

Step 3.

4- Day 7: Wash the pouch. We labeled a 2ml eppendorf per mouse and prepared a beaker with cold and heparinized 1X PBS. We keep it on ice. At 24 hours after carrageenan injection, we proceeded to wash: With 21G needle we injected the 2ml of cold PBS. Massage without removing the needle for 30s, being careful not to damage the mouse. We slowly remove the needle and syringe without exerting too much pressure.

Step 4.