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Retro-orbital injection of virus or dye in mice

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In Development

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ABSTRACT

This protocol is following:



Tal Yardeni, Michael Eckhaus, H. Douglas Morris, Marjan Huizing, Shelley Hoogstraten-Miller (2011). Retro-orbital injections in mice. LabAnimal.

<http://10.1038/labon0511-155>

GUIDELINES

Please adhere to your institute IACUC guidelines of animal care.

MATERIALS

NAME ▾

CATALOG # ▾

VENDOR ▾

29G x 12.7mm 0.3ml syringe

09230

Ulticare

STEPS MATERIALS

NAME ▾

CATALOG # ▾

VENDOR ▾

29G x 12.7mm 0.3ml syringe

09230


Ulticare

MATERIALS TEXT

It is important that the needle used has low friction so that the injection is at a slow and consistent rate.

Injection

- 1 Prepare either virus dilution (5.0×10^{11} - 1.0×10^{12}) with PBS prepare or a [dye aliquot](#). Injection is up to 200ul per mouse.
- 2 Take one mouse from the cage into an induction chamber and start isoflurane at 3% with flow rate of ~1L/min
- 3 After the mouse has slow breathing (~1/s) move the mouse to a nose cone delivery of isoflurane at 1.5% with around the same flow rate.

4 

Expose the eye ball with two fingers (above and below) and make sure the you are not pressing on the trachea and the mouse's breathing is regular.

5 

Use a 29G syringe at a 30-degree angle beveled downwards until you hit the bone, retract a bit and slowly inject. See cited paper for more details.



Tal Yardeni, Michael Eckhaus, H. Douglas Morris, Marjan Huizing, Shelley Hoogstraten-Miller (2011). Retro-orbital injections in mice. LabAnimal.
<http://10.1038/labon0511-155>

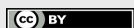


29G x 12.7mm 0.3ml syringe
by [Ulticare](#)
Catalog #: [09230](#)

6 Remove the needle slowly and press the eyelid shut for a few seconds.

7 

Validating the injection was successful is possible with JF525 by looking at the pee of the animal after it wakes up. Leaving the animal in a clean cup with kim-wips will collect the pee and it would seem pink.



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