
 <p>University of Zurich UZH Institute of Laboratory Animal Sciences</p>	<p align="center">Standard Operating Procedure</p> <p align="center">SOP</p>	<p align="center">Page 1 of 4</p>
<p>Date: 17.01.2017</p>	<p align="center">Inperitoneal injection of mice i.p. Injection</p>	<p>LTK-TRT-10-EN Version: B</p>

This SOP replaces:	Date: None Version: None
Reason for Change:	None
Related SOPs:	SOP-LTK-TRT-8-EN Scoring Post-Application
Indication of Use:	Bringing cells or substances in solution into the peritoneal cavity of mice
Aim of SOP:	This protocoll describes how cells or solutions are injected intraperitoneally (i.p.) through the abdomen of mice
Distribution:	<ol style="list-style-type: none"> 1. Original: Thorsten Buch 2. Copy: Animal facilities 3. Intranet
Attachments:	
Generated at: 26.11.14	Checked and approved at: 08.12.2014
by: Thorsten Buch	by: Philippe Bugnon

Responsible Persons: Researcher with Modul 1 after registration on animal license

Method: Injection

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Principle of Method: -

Units and Formulas: None

Material to be used:
-

Min/Max amount:
 Maximum injection volume is 10 µl/g mouse = 200 µl/20 g.

Material acquisition: -

Calibration:-


Storage of Material: -

Machine:
Laminar flow/changing station

Material:

1. 1 ml syringe/insulin syringe
2. 26-27 gauge needle, 12 mm length

Reagents: -

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Safety:
 Rules for the respective animal room have to be followed

Method Description:
 This method allows the introduction of liquids directly and quickly into the vascular system of the mouse. The recommended needle size for i.v. injections in the mouse is 26-28 gauge. Maximum injection volume is 10 µl/g mouse = 200 µl/20g.

1. Place cage with animal and second cage (if more than one mouse is injected) under laminar flow/changing station
2. Restrain the mouse very well with one hand, to prevent injury to the mouse while injecting. If possible, also restrain one hind limb.
3. Turn the mouse so the ventral side is facing up. Now tilt the mouse so that the head is facing down and the abdomen is nearest to you.
4. With the other hand, insert the injection needle at the lower right abdomen, at 30 degrees to the skin, and along the imaginary diagonal line connecting the right hind limb and the left forelimb. Insert about half a centimetre into the abdomen.
5. Aspirate a little to check no blood or greenish liquid appears, which would be signs of needle being inserted into blood vessel or intestines. If any aspirate is seen, stop.
6. If there is no aspirate, proceed with injecting the liquid.
7. Withdraw the needle and return the mouse to the second cage. Observe for any signs of distress or trauma.


Controls:
 -

Factors influencing outcome:
 -

Criteria for approving outcome:
 all liquid injected without complications

Analysis:
 -

Documentation:
 The experiment has to be recorded as required by the respective animal permit. Also an entry in the lab book has to be made. The SOP Scoring post-application has to be followed.

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Problem management:

In case of serious adverse events the animal has be euthanized. The SOP Scoring post-application has to be followed. Contact supervisor, lab head or vet.

Sample storage:

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Method validation:

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Literatur:

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