



**Date:** 22.07.2016

**Intravenous injection of mice**  
i.v. Injection

**LTK-TRT-7-A-EN**  
Version: A

**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 blood of mice

**Aim of SOP:** This protocol describes how cells or solutions are injected intravenously (i.v.) through the tail vein of mice

**Distribution:**

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 including EAE protocol

**Method:** Injection



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**Principle of Method:** -

**Units and Formulas:** None

**Material to be used:**

-

**Min/Max amount:**

Maximum injection volume is 5 µl/g mouse = 100 µl/20g.

**Material acquisition:** -

**Calibration:-**

**Storage of Material:** -

**Machine:**

Laminar flow/changing station

**Material:**

1. 1 ml syringe/insulin syringe
2. 26-28 gauge needle
3. restrainer
4. water in beaker at 45°C

**Reagents:** -



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**Safety:**

Rules for the respective animal room have to be followed

**Method Description:**

1. Warm the tail of the mouse in 45°C warm water.
2. Restrain the mouse in the physical restrainer device or anaesthetize the mouse.
3. Rotate the tail slightly to visualize the vein.
4. Firmly hold the tail between the thumb and forefinger of your hand that does not hold the syringe. Hold the tail above (proximal to) the injection site.
5. Insert needle (27-30 gauge) into the vein at a slight angle. DO NOT aspirate !
6. Inject slowly, watching for clearing of the lumen ( to ensure you are injecting into the vein). You should see the vein become clear as the fluid replaces the blood.
7. Withdraw needle and compress site of injection.
8. Return the animal to the cage after visual check of the injection site

**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 to 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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