 University of Zurich <small>UZH</small> Institute of Laboratory Animal Sciences	Standard Operating Procedure SOP	Page 1 of 2
Date: 06.08.2018	Intravenous injection of mice i.v. Injection	LTK-TRT-7-EN Version: B


This SOP replaces:	Date: 26.11.14 Version: A
Reason for Change:	Superfluous boxes where removed
Related SOPs:	
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:	<ol style="list-style-type: none"> 1. Original: Thorsten Buch
	<ol style="list-style-type: none"> 2. Copy: Animal facilities
	<ol style="list-style-type: none"> 3. Intranet
Attachments:	
Generated at: 02.08.18	Checked and approved at: 03.08.18
by: Thorsten Buch	by: Dr. Prajwal

Responsible Persons: Researcher with Module 1 after registration on animal license including EAE protocol

Method: Injection

Min/Max amount:
 Maximum injection volume is 5 µl/g mouse = 100 µl/20 g.

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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

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

Criteria for approving outcome:
all liquid injected without complications

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.

Problem management:
In case of serious adverse events the animal has to be euthanized. Contact supervisor, lab head or vet.