May 17, 2019

Working

Vandy – Post Clamp Anesthesia

Louise Lantier[1]

[1]Vanderbilt University

dx.doi.org/10.17504/protocols.io.zdnf25e

Mouse Metabolic Phenotyping Centers
Tech. support email: **info@mmpc.org**

Lili Liang

ABSTRACT

Summary:

After the last sample is taken for the clamp, the mouse is anesthetized in order to harvest tissues. It is very important that the mouse remain alive during tissue harvesting for future signaling or metabolite analysis. The mouse is therefore given a sub-lethal dose of pentobarbital to induce anesthesia (~70mg/kg pi or 35mg/kg iv).

EXTERNAL LINK

https://mmpc.org/shared/document.aspx?id=297&docType=Protocol

MATERIALS

NAME	CATALOG #	VENDOR
Pentobarbital/ Nembutal® at 50mg/mL		
Blunted needle		
Sterile Saline solution		

MATERIALS TEXT

Reagent Preparation:

Reagent 1: Diluted Pentobarbital 5 mg/mL in saline from stock Pentobarbital (Nembutal®, 50mg/mL)

1. For a 30mL Saline bottle: Inject 3.3mL of Stock Pentobarbital (50mg/ml), mix.
2. For a 10mL Saline bottle: Inject 1.1mL of Stock Pentobarbital, mix.

1 Draw up the desired volume of **diluted Pentobarb (5mg/ml in saline)** in a blunted syringe.
- To give 35mg/kg, multiply body weight (grams) by 7, to get the volume to inject in uL.
- Pentobarb (uL) = BW (g) * 7

2 Steadily inject the pentobarbital in the jugular line of the catheterized mouse.

3 If the mouse is not completely anesthetized when taking the tissues, inject more by 50uL increments.

Concentration: 5 mg/ml

Pentobarb mg/kg	BW mouse (g)							
	20	25	30	35	40	45	50	55
70	280	350	420	490	560	630	700	770
100	400	500	600	700	800	900	1000	1100