

Date of Perfusion: 20

Project Name:

Experimenter:

Assistant(s):

Animal Data

Animal ID:

Species: rat

Sex: ♂ ♀

Strain: LE

Genotype:

Date of Birth:

Age (postnatal days):

Weight:

g

Source: Harris Lab colony cage#

Notes (e.g., surgery, behavioral tests, etc.):

Perfusion Reagents*Anesthetic:* isoflurane

Dose:

Route: inhalation

Pre-fixative Perfusate: Krebs-Ringers Carbicarb (KRC)

Composition (mM): sodium chloride (118), potassium chloride (4.7), calcium chloride (2), magnesium sulfate (4), D-glucose (11), sodium bicarbonate (12.5), sodium carbonate (12.5)

pH =

Osmolarity (mmol/kg) =

Temperature (°C) =

Notes:

Fixative:

Composition: glutaraldehyde (2.5%), formaldehyde (2%), sodium cacodylate trihydrate (100 mM), calcium chloride (2 mM), magnesium sulfate (4 mM)

pH =

Osmolarity (mmol/kg) =

Temperature (°C) =

Notes:

Other:

Composition (mM):

pH =

Osmolarity (mmol/kg) =

Temperature (°C) =

Notes:

Perfusion

| Step | Time (min:sec) | Notes |
|---|-------------------|---|
| Begun Anesthetizing the Animal: | 00:00 | In desiccator jar saturated with isoflurane. |
| Toe Pinch | | Response (circle one): Absent Present |
| Animal Fitted with Nose Cone: | | Vaporizer settings: 5% isoflurane; 400ccm O ₂ /CO ₂ Ventilator settings: 120 breaths/min; 1.5cc tidal volume |
| Tracheotomy Begun: | | |
| Vaporizer Settings Adjusted: | | Vaporizer settings: 4% isoflurane; 100ccm O ₂ /CO ₂ |
| Thoracic Cavity Open: | | |
| Right Atrium Clipped: | | |
| Left Ventricle Punctured & Perfusion with Pre-fixative Begun: | | Pressure (mmHg) = 80 |
| Perfusion with Fixative: | | Pressure (mmHg) = 80; Animal is deceased at this point. |
| Pressure Increased to 120 mmHg: | | |
| Pressure Increased to 180 mmHg: | | |
| Chin Clip and Fixative Observed: | | Fix from Chin = ; Fix from Nose/Mouth = |
| Pressure Decreased to 80 mmHg: | | |
| Pressure Decreased Further: | | Pressure (mmHg) = |
| Other Steps: | | |
| End of Perfusion: | | |
| Brain Removed from Skull: | | |
| Notes: | | |

Post-perfusion Fixation

Fixative type:

Duration (hr, or indicate start and end time):

Temperature (°C) =

Appearance of the Brain (e.g., color, firmness, presence of blood, etc.):

Vibratome Sectioning

Date of Sectioning:

Section Thickness (μm) =

Plane of Section: Parasagittal | Coronal | Horizontal

Total Number of Sections Collected (indicate R/L hemisphere for parasagittal plane):

Notes (lost or damaged sections, etc.):