

## **CARE AND MAINTENANCE OF JUGULAR VEIN CATHETER WITH VASCULAR ACCESS BUTTON**

- **Mice with jugular vein catheter should be individually housed.**
- **The catheter should be flushed with sterile saline and refilled with sterile catheter locking solution 6 days after order ship day, and subsequently every 7 days.**
- **Always clean the PinPort™ with 70% ethanol before use.**

### *Materials required:*

- (3) 1 ml syringes
  - 1 ml syringe half filled with sterile saline – *Withdrawal Syringe*
  - 1 ml syringe filled with sterile saline – *Flushing Syringe*
  - 1 ml syringe filled with locking solution – *Locking Solution Syringe*
- (3) PinPort™ injectors (Instech cat# PNP3M)
- Catheter locking solution: Heparin/Glycerol (500 IU heparin/ml in 50% Glycerol solution)
- Sterile saline
- 70% EtOH
- Sterile swabs

### **Procedure for maintenance of jugular vein catheter with vascular access button**

1. Attach PinPort™ injectors to syringes and flush sterile saline or locking solution through injector to ensure there are no air bubbles.
2. Preferably anesthetize the mouse with isoflurane anesthesia or restrain with a commercially available restrainer.
3. Clean top of PinPort™ with sterile swab dampened with 70% ethanol and let dry.
4. Attach *Withdrawal Syringe* and injector to the button. Withdraw the catheter locking solution until blood is seen in the PinPort™ injector.\*
5. Remove *Withdrawal Syringe* and PinPort™ injector. Flush blood from *Withdrawal Syringe* and PinPort™ injector if using on additional mice.
6. Attach *Flushing Syringe* and PinPort™ injector to the button and flush with 0.05 ml of sterile saline.
7. Remove *Flushing Syringe* and PinPort™ injector from button.
8. Attach *Locking Solution Syringe* and PinPort™ injector to button and fill catheter with 0.01 ml of catheter locking solution.
9. Remove *Locking Solution Syringe* and PinPort™ injector.

\*If the locking solution cannot be removed reposition the mouse and retry. If the locking solution still cannot be withdrawn, replace *Withdrawal Syringe* with *Flushing Syringe* and flush with a small amount of saline to clear the line.

For additional help with catheter maintenance please contact Surgical Services at [surgicalseervices@jax.org](mailto:surgicalseervices@jax.org)