

FLSC Standard Operating Procedure for the Preparation of Rodent Cocktail

Purpose:

Rodent Cocktail is a mixture of three agents diluted in saline used in the anesthesia of rodents, primarily in mice. It is imperative that there are precise measurements for all drugs administered. This SOP provides instruction for consistent and reliable preparation of Rodent Cocktail to ensure continued confidence and efficacy in the established anesthetic regime.

Equipment:

4 – 3cc syringes	1 – 10-12cc syringe
4 – 22g x 1” needles	Ketamine injectable 100mg/ml
Xylazine injectable 20mg/ml	Acepromazine injectable 10mg/ml
Sterile saline for injection	Sterile stoppered 20ml bottles
Anesthetic labels	

Recipe:

1.8cc Ketamine
1.8 cc Xylazine
0.6 cc Acepromazine
15.8cc Sterile saline

Process:

1. Apply labels to all bottles. The label must include the name of the compound, the date mixed, the expiration date, the Ketamine lot number, and the suggested dosage. **The expiration date of all compounded injectable drugs is determined by the date of the ingredient soonest to expire or 180 days – whichever comes first.**
2. Weigh the empty bottle and record the weight on the label and on the individual drug log sheet.
3. Draw up 15.8cc sterile saline and inject it into the bottle. Use the 10 to 12cc syringe and the 3cc syringe and eliminate air bubbles for accurate measurements.
4. Add the Ketamine to the bottles. Record the amount used in the Controlled Substance Log.
5. Ketamine tends to foam if injected with force, therefore inject slowly.
6. Add the Xylazine to the bottles.
7. Add the Acepromazine to the bottles.
8. Add the mixed Rodent Cocktail volume to the Controlled Substance Log.
9. Weigh each bottle and record the weight of the full bottle on the label and on the individual drug log sheet.
10. Store Rodent Cocktail in the dark and avoid high temperatures to maintain potency.
11. Rodent Cocktail is generally given according to weight to mice using the following calculation:
 $(BW \times 10) - 50 = \text{microliters Rodent Cocktail to be given intraperitoneally (IP)}$. This will vary based on strain, age, and health status.