

**UNIVERSITY OF DELAWARE
OFFICE OF LABORATORY ANIMAL MEDICINE**

Buprenorphine – Rats SOP #A-104

Analgesic (Pain Medication)

DEA Scheduled drug. Must be handled, recorded, and disposed of properly!

- Rat Dose: 0.01- 0.05 mg/kg SC or IP
- Concentration: 1/20 Dilution= 0.015 mg/ml (Undiluted=0.3 mg/ml)
- Frequency: 1st dose - at surgery or when prescribed
(May need to decrease injectable anesthesia by 10-25%)
2nd dose - 4-6 hours later
Subsequent doses (if needed) - every 8-12 hours

1. Check that mixture is not expired and has not changed appearance
2. Clean port of vial with alcohol prior to each withdrawal
3. Withdraw drug using a new sterile needle and syringe for each animal
4. Inject drug subcutaneously or intraperitoneally in animal
5. Record volume and dilution for each animal

Injection Volume of 1/20 Dilution of Buprenorphine (per Dose and Body Weight)

Body Weight (grams)	Dose = 0.01 mg/kg Injection Volume (ml) SC or IP	Dose = 0.05 mg/kg Injection Volume (ml) SC or IP
150 g	0.10 ml	0.50 ml
200 g	0.13 ml	0.66 ml
250 g	0.17 ml	0.83 ml
300 g	0.20 ml	1.00 ml
350 g	0.23 ml	1.16 ml
400 g	0.27 ml	1.33 ml
450 g	0.30 ml	1.50 ml
500 g	0.33 ml	1.66 ml
550 g	0.37 ml	1.83 ml

Note: Upon expiration or if solution has changed appearance (discoloration, precipitation, etc.) – **please give to OLAM staff for disposal.**

DO NOT DISPOSE OF ANY DRUGS YOURSELF!