

Intramuscular (IM) Injections

Rat and Guinea Pig



The quadriceps muscle is used for IM injections in the rat and guinea pig. The needle should be as small as possible ($\leq 25g$) and the maximum volume given should not exceed 25ul per site or 50ul total for the rat or 100ul for the guinea pig.

Intramuscular injection is rarely used in the mouse, gerbil or hamster because the amount of material that can be injected into its limited muscle mass is so small that the technique is not practical. If IM injection must be used, the smallest needle possible should be used (27g), and the maximum volume administered should be 0.05ml per site. The quadriceps is the muscle of choice.

Rabbit



Note: Technician should be wearing gloves

The recommended sites and technique for IM injection in the rabbit are the cranial (front) thigh muscles, or the lumbar muscles to the side of the spine and just cranial to the pelvis. Caudal (back) thigh injections are more likely to damage the sciatic nerve and should be avoided. Rabbits large muscle mass requires a relatively long needle (1/2" - 1") to adequately introduce the material deep within the muscle tissue, a distance of approximately 7 - 10 mm in an adult rabbit.