ABSTRACT

Summary:

Intravenous administration via tail vein is used to acutely deliver drug, hormones, and adeno-associated virus in mice. A large fraction of injectate will be cleared by liver.

MATERIALS

- Heat Lamp Contributed by users
- 1 ml syringes Contributed by users Catalog #309659
- 1 ml syringes (or U-100 Insulin Syringe) BD Biosciences Catalog #329461
- 27G needles Contributed by users Catalog #305109
- 0.9% Saline Hospira (Pfizer) Catalog #0409-4888-10
- 70% Ethanol Contributed by users

Note:

Hospira, RRID:SCR_003985
BD Biosciences, RRID:SCR_013311

Protocol status: Working
We use this protocol and it's working
1. Place mice in clean cages and keep warm with a heat lamp for ~5 min with constant monitoring to induce vasodilation.

2. Transfer mice to a restrainer with a hole for the tail.

3. Apply 70% Ethanol wipes to tail and turn 45° for a visible presentation of tail vein.

4. Introduce a 27G syringe into tail vein to administer an injectate into mice. (For precise volume introduction, a U-100 insulin syringe can be used to avoid dead volumes.)

5. Apply light pressure over the injection site for ~30 sec to prevent backflow.

6. Return mice to housing cages and monitor for the next several days for any evidence of swelling or complications at the injection site.