Oral Gavage of Mice

Materials

Solution that you want to give to the mouse
Sterile gavage needle

Methods

1. 6- to 8-week-old C57BL/6 WT mice (females and males) were purchased.
2. Use a bulb tipped gastric gavage needle attached to a 1 ml syringe to gavage each mouse with 100 μL of the solution that you want to give to the mouse.
3. Gently scruff the mouse, by firmly grasping the loose skin over its neck and back with thumb and fingers. Pull back the animal's head with your index finger to immobilize the head and straighten the esophagus for insertion of the gavage needle.
4. Maintain the mouse in an upright position and direct the bulb tip of the gavage needle along the side of its mouth and over its tongue. Gently pass the needle along the roof of the mouth and advance it down the esophagus. If there is any resistance felt during this procedure, remove the gavage needle and re-insert it.
5. Slowly inject 100 μL of the bacterial inoculum and gently remove the gavage needle. Monitor the breathing rate and behavior of the mouse after returning it to its cage.

Reference

Winston, J. A., Thanissery, R., Montgomery, S. A., Theriot, C. M. Cefoperazone-treated Mouse Model of Clinically-relevant Clostridium difficile Strain R20291. J. Vis. Exp. (118), e54850, doi:10.3791/54850 (2016).