

concentrator (Dual flow oxygen concentrator for oxygen bar, Hebei, China), a water bath (Elmasonic S, Elma, Germany), and a peristaltic perfusion pump (BT100-2J, Hebei, China). The rat was placed on a surgical board (Plas Labs, Lansing, MI, USA) above a heating pad maintained at 37 °C, and anaesthetized by isoflurane (5% for induction and 2.5% for maintainance). Anaesthesia was maintained for the duration of the experiment and was monitored by toe pinch. The skin of the abdomen was then sterilized with 70% ethanol-containing cotton wool, opened using sterile scissors and non-toothed forceps. A midline longitudinal incision was made 1 cm below rat's sternum till 1 cm above rat's tail in the pelvic region followed by two mid-transverse incisions to left and right of the midline to expose rat's viscera.



**Figure 2.1** Anesthesia system linked to an oxygen concentrator and a peristaltic perfusion pump.