**Nephrectomy**

**ORDER CODE:** 5/6 NEPHREX

**SPECIES:** Rat, Mouse

**DIET SUPPLEMENT:** None required

This procedure involves the surgical removal of one kidney and 2/3 of the other kidney.

**Surgical Procedure**

The animal is prepared for surgery using pre-operative and anesthetic procedures as described in Charles River Reference Paper Vol. 13 #1, 2005.

**Phase I:**

A ventral midline incision into the abdomen is made and sterile drape is applied. The intestine is retracted laterally to expose the animal’s left kidney. The kidney is freed from the surrounding tissue. A piece of suture is placed around each pole of the kidney at its 1/3 position. The sutures are gently ligated around the kidney. The 1/3 kidney on each end is excised right beyond the ligatures. The abdominal incision is closed with suture and wound clips.

**Phase II:**

One week after the first step, the animal is anesthetized and prepared as described earlier. The hair on the back of lumbar area is shaved. A cranial-caudal skin incision is made on the animal’s right lateral to the spine with its cranial terminus just behind the rib cage. The abdominal cavity is entered. The kidney is freed from the surrounding tissue and is pulled out of the incision gently. The adrenal gland, which is attached loosely to the anterior pole of the kidney by connective tissue and fat, is gently freed by tearing the attachments, and is put back into the abdominal cavity. The renal blood vessels and the ureter are cauterized. The kidney is then removed by transecting the vessels and ureter just distal to the cauterized spot. The incision is closed with suture and wound clips.

**IACUC**

Charles River’s Institutional Animal Care and Use Committee (IACUC) governs the entire surgical process, including any post-operative holding in Charles River facilities prior to shipment. The receiving institution’s Animal Care and Use Committee, investigators, and animal care staff are responsible for the well-being of the animal subsequent to its arrival. Justification for use of surgically-modified animals, review of experimental protocols, authorization to order animals that are surgically modified from Charles River, and all aspects concerning the use of surgically-modified animals after they arrive at the institution are the responsibility of the receiving institution’s IACUC.