**Description of Additional Supplementary Files**

**File Name: Supplementary Movie 1**

**Description:** Calcium measurements in Clcn2+/+ (+/+) zona glomerulosa cells. Representative time lapse imaging video (sped up six times, real time: two minutes) of Fura2 fluorescence in Clcn2+/+ adrenal slices under basal conditions. Imaging was performed and analyzed as described in Fig. 4.

**File Name: Supplementary Movie 2**

**Description:** Calcium oscillations in Clcn2op/op (op/op) zona glomerulosa cells. Representative time lapse imaging video (sped up six times, real time: two minutes) of Fura2 fluorescence in Clcn2op/op adrenal slices under basal conditions. Imaging was performed and analyzed as described in Fig. 4