**Supplementary Material**



**Supplementary Figure 1**. **Dome formation in** **primary isolated TECs from mouse kidneys**. TECs were isolated from WT and PKO C57BL/6 mice by size fraction and verified by various validated methods (30). A couple of domes (pointed by arrows) were formed and shown as examples in a micrograph from cultured WT TECs, but representing the phenomena of both WT and PKO TECs. The formation of domes was due to an intact transcellular transport process, which is a characteristic of confluent TECs (31). Images were taken under 200× magnification.