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Localization of Aquaporins in Polycystic Kidney

Reply to the Letter to the Editor by O. Devuyst

Dear Sir,

We read the letter by Dr. Olivier Devuyst regarding the origin of cyst-lining cells in the kidneys of ADPKD. Their data confirm our data, which showed that the cyst-lining cells in ADPKD kidneys are well-differentiated in the terms of water channel (AQP-2 in the apical membrane and AQP-3 in the basolateral membrane) and that about 30% of the cyst originate from collecting-duct cells, although they did not examine the immuno-

staining of AQP-3. In addition to our data, they showed that AQP-1 also maintains its polarized distribution. Taken together, it is unlikely that polarity loss of the tubular epithelium is essential in the ADPKD kidney and that the major role of PKD genes is induction of cell polarity. On the other hand, the origin of about one third of the cysts, which do not express either AQP-1 or AQP2, remains to be determined.