## **Supporting Information**

## Monitoring of cell layer coverage and differentiation with the organic electrochemical transistor

M. Ramuz,<sup>a</sup> A. Hama, <sup>a</sup> J. Rivnay, <sup>a</sup> P. Leleux, and R. M. Owens<sup>a</sup>



Figure S1: Cell layer capacitance extracted from the fit of Figure 2. Note that values of  $C_{OECT} = 1.5 \times 10^{-8} \text{ F} (\pm 0.1 \times 10^{-8} \text{ F})$ ; and  $R_s = 8 \times 10^3 \Omega (\pm 1 \times 10^3 \Omega)$  were fixed for the fit.



Figure S2: Figures of merit of the OECT. a) I(V) characteristic of the OECT without cells. b) Transconductance versus the frequency with (grey) and without (black) MDCK II cells at day 4.



Figure S3: Calcium switch assay using OECTs (from Figure 3) with slopes indicated on the curve.



Figure S4: Addition of EGTA to MDCK II cells (figure 4 from manuscript) with slopes indicated on the curve.