Supplemental Figure S8 (related to Fig. 6). FoxJ1 functions downstream of TAp73α in the transcriptional network to drive motile multiciliogenesis. Functional rescue.

(A-C) Reintroduction of TAp73α (Flag-tagged) induces expression of FoxJ1 in p73KO MTEC cultures to WT levels.

(A) WT and p73KO MTECs, infected at seeding with lentivirus targeting mouse TAp73α expression to MCC-fated cells. Representative confocal images on ALI D14 stained for FlagTAp73α and FoxJ1.

(B) Quantitation of FoxJ1-positive cells from (A) in all TAp73α-expressing at ALI D4, D7 and D14. Data derived from five WT and five p73KO mice.

(C) Reintroduction of TAp73α induces expression of FoxJ1, Rfx2, Hydin and Dnahc11 in p73KO MTEC cultures. qRT-PCR assay of WT and p73KO MTEC cultures, infected and uninfected at ALI D4.

(D) p73KO MCCs are 100% rescued by FoxJ1 to undergo motile multiciliogenesis. Representative confocal images of the epistasis experiment from Fig. 6E-G. Immunofluorescence for Ac-α-tub with DAPI counterstain.