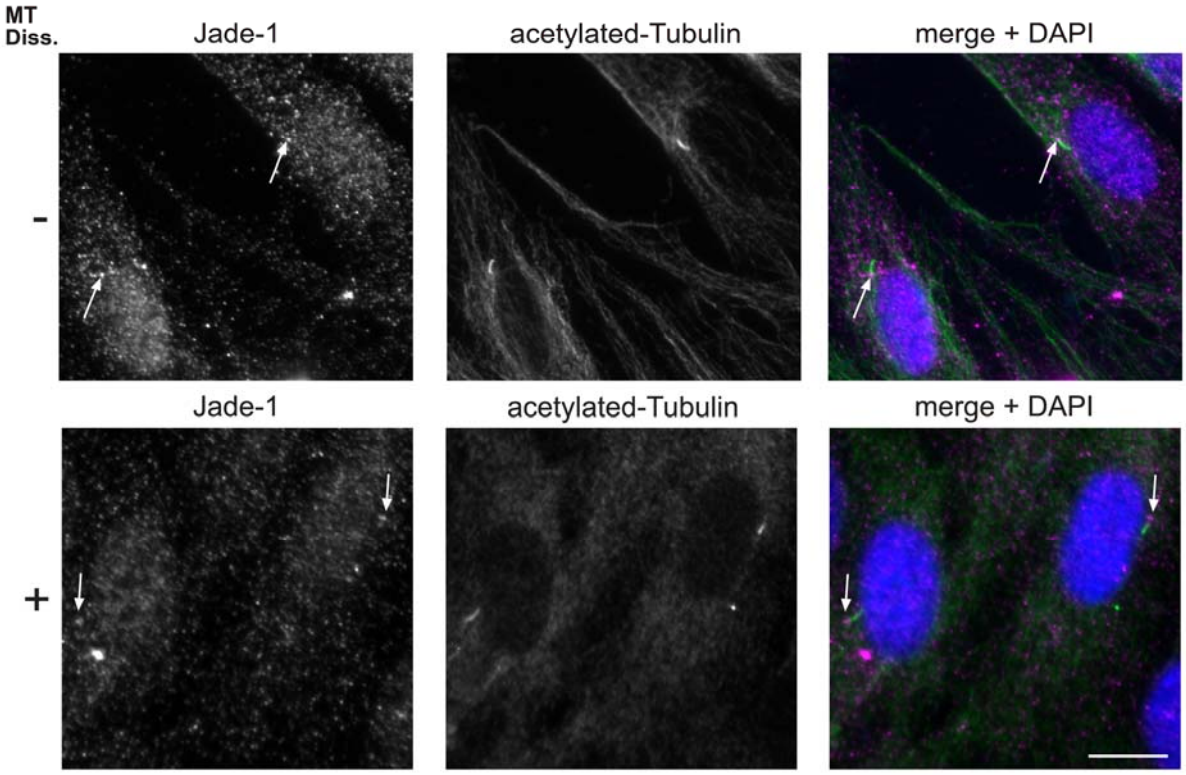
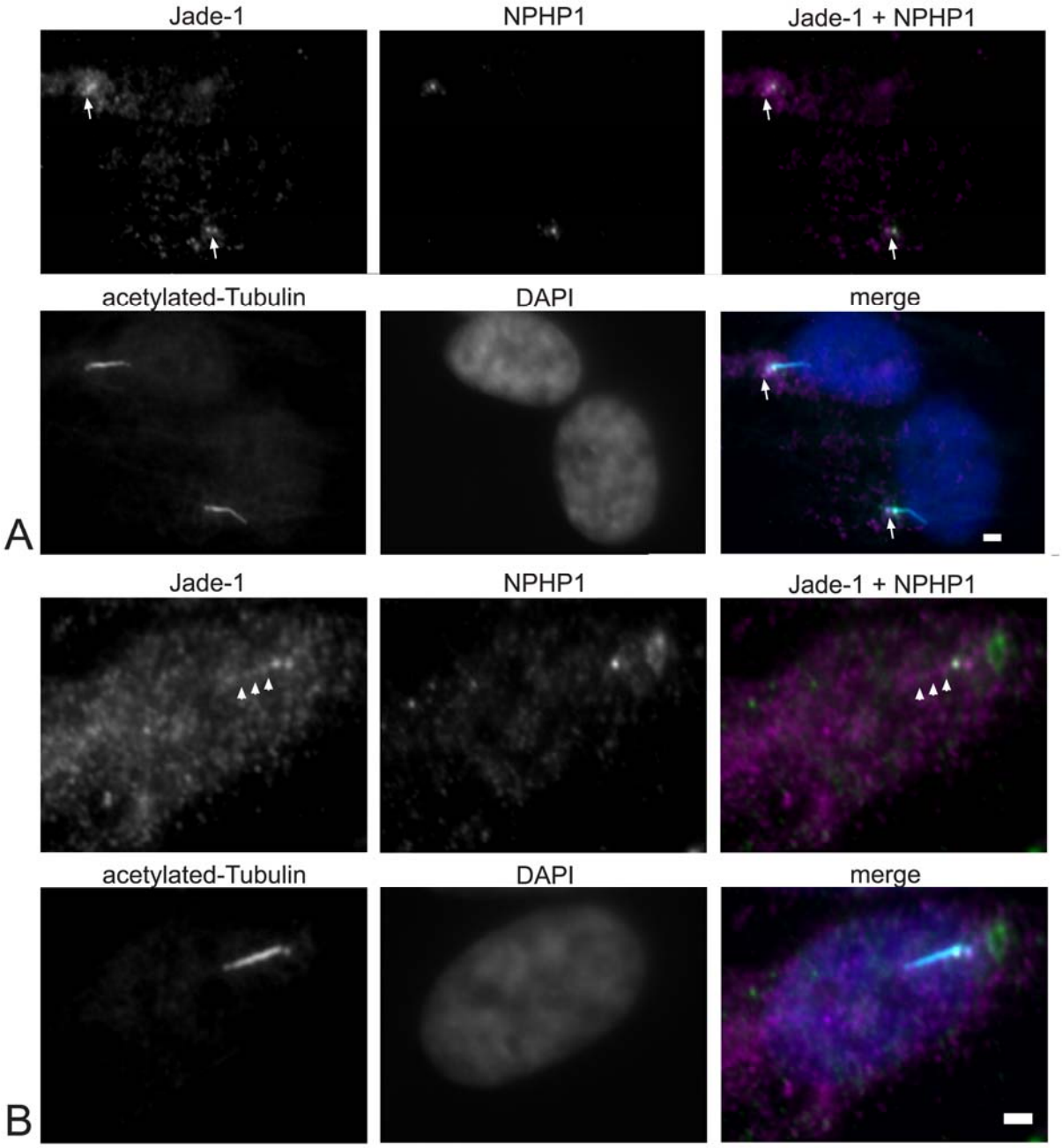
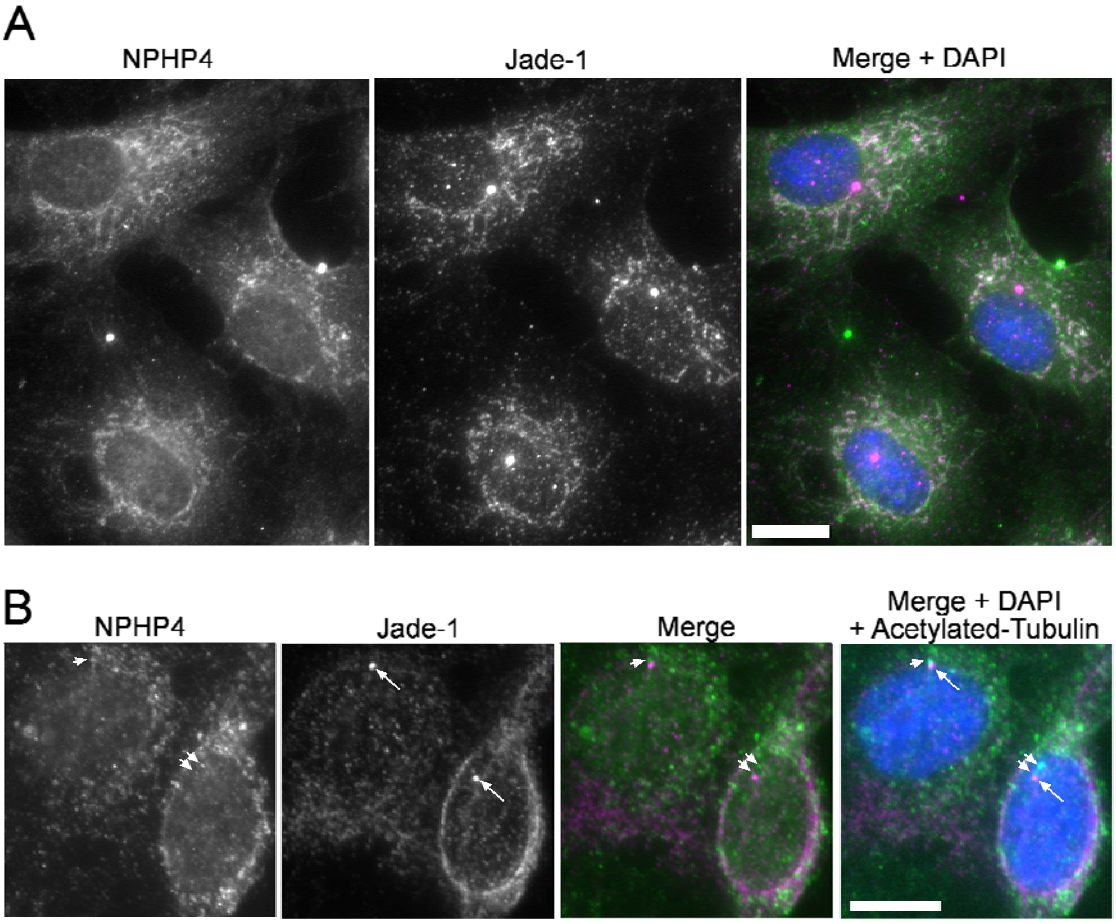


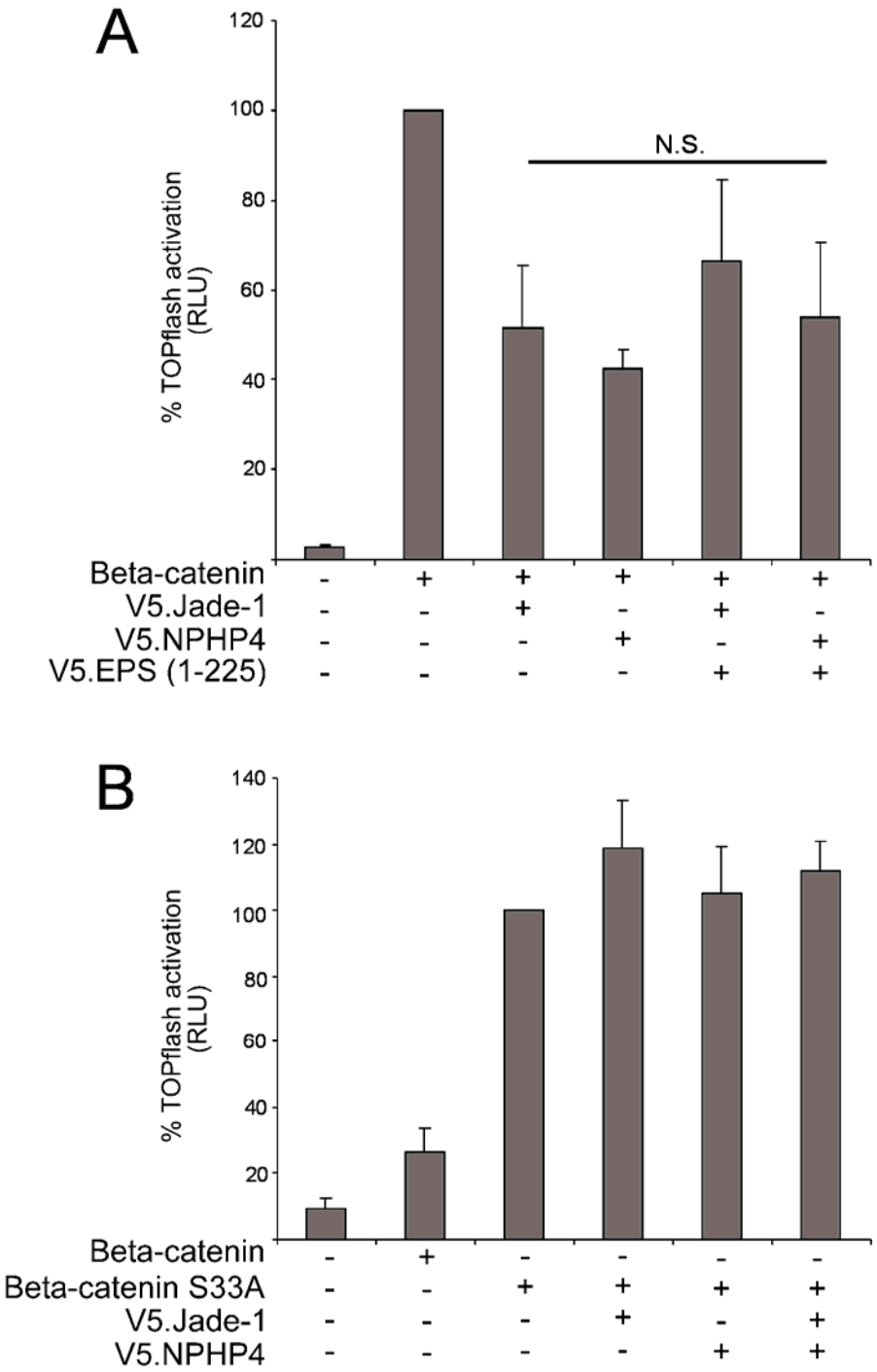
Supplementary Figure 1. Jade-1 localizes to the basal body independently of the microtubule network. RPE-1 cells were serum starved for 48 hours and then fixed immediately (-) or after 30 minutes on ice which is sufficient to dissociate the microtubule network (+). Microtubules are visualized with anti-alpha tubulin (green). Endogenous Jade-1 (magenta) can be visualized at the base of the cilia in both cases (arrows). Merge with DAPI; Scale bar = 10 μm.



Supplementary Figure 2. Jade-1 colocalizes with transition zone marker NPHP1 at the ciliary base. Serum starved RPE-1 cells were immunostained for endogenous Jade-1 (magenta), endogenous NPHP1 (green) and endogenous acetylated-tubulin (cyan) as a ciliary marker. A. Jade-1 localized to the basal body and colocalized with NPHP1 at the transition zone (arrows). B. Jade-1 colocalized with NPHP1 and could also be identified in the cilium (arrow heads). Merge with DAPI; Scale bar = 2 μm.



Supplementary Figure 3. Jade-1 colocalizes with NPHP4 peri-nuclearly and at the cilium. A. RPE-1 cells grown on glass coverslips were serum starved for 24 hours and fixed using methanol (A) or PFA (B). Endogenous NPHP4 (green) co-localizes with endogenous Jade-1 (magenta) in the peri-nuclear region (A) and at the cilium (B). Scale bar = 10 µm.



Supplementary Figure 4. The additive decrease of Wnt reporter activity is specific to NPHP4 and Jade-1 and requires phosphorylation of β-catenin. A. V5.NPHP4 and V5.Jade-1 were transiently transfected either with empty vector or with a control protein (V5. EPS^{1-225}) and compared to F.β-catenin activation when transfected with empty vector alone. The combination of V5. EPS^{1-225} with V5.NPHP4 or V5.Jade-1 did not further reduce Wnt activity (N.S. = not significant; data normalized to β-catenin stimulation; n=3; error bars = sem) **B.** A mutated form of β-catenin (S33A) led to a heightened stimulation of the TOPflash Wnt reporter assay and was not reduced by Jade-1 or NPHP4 alone or in combination. (data normalized to β-catenin S33A stimulation; n=4; error bars = sem).