Supplementary Figures



Supplementary Figure 1: B16F0 tumour growth and angiogenesis in β 3integrin-heterozygous mice are sensitive to NRP1 perturbations. Tumour growth and angiogenesis were measured in animals of the indicated genotypes. Left panels. Mice were given subcutaneous injections of B16F0 tumour cell lines. To generate NRP1-EC-KO (EC-Null), 21-day slow-release OHT pellets were administered 3-days prior to tumour cell injection. OHT-treated Cre-negative (EC-NRP-WT) littermates served as controls. Tumour volumes were measured after 12 days of growth (mean +SEM of 3 independent experiments; n \geq 10 animals per genotype). Representative pictures of tumour macroscopic appearances are shown. Scale bar = 10mm. Right panels. Blood vessel density was assessed by counting the total number of endomucin-positive vessels across tumour sections (mean +SEM; n \geq 10 sections per genotype).



Supplementary Figure 2: No changes in the expression/activity of proteins involved in NRP1-regulated VEGF signalling. ECs were seeded on a complex matrix containing gelatin, collagen, fibronectin and vitronectin to preserve β 3-VEGFR2 interactions, and were stimulated with 30 ng/ml VEGF at 37°C over a time course. ECs were lysed and analysed by Western blot (WB) for protein levels of phosphorylated (phospho) and total p130cas and FAK. HSC-70 served as a loading control. Data are representative of 3 independent experiments.



Supplementary Figure 3: Polyoma-middle-T-antigen immortialised endothelial cells maintain the endothelial identity. ECs were trypsinised and analysed by flow cytometry for surface levels of the EC markers VE-Cadherin, CD31, and ICAM-2. Median fluorescence intensity was measured after forward versus side scatter data were tightly gated around, and normalised to, an isotype control. Representative flow-cytometric histogram profiles of β 3-WT and β 3-HET ECs are shown.