

Figure S1. RA promotes Wnt5a transcription in primary NB cells as well as other NB cell lines. (A) Wnt5a mRNA levels in SH-SY5Y cells treated with 5 μ M RA for 30 min, 3, 6 and 9 days or DMSO (control). NCBI GEO accession number: GSE58070; n=2. Statistical test via one-way ANOVA. *P<0.05. (B) Wnt5a mRNA levels in BE(2)-C cells treated with 5 μ M RA for 6, 24 and 72 h or DMSO (control). NCBI GEO accession number: GSE45587; n=3. Statistical test via one-way ANOVA. (C and D) Wnt5a mRNA in NB patient-derived xenograft cells (C) NB-PDX2 and (D) NB-PDX3 treated with RA for 6 and 24 h; n=12 (RA-groups); n=20 (DMSO groups). Statistical test via one-way ANOVA with Tukey's multiple comparison test. RA, retinoic acid; ROR1, receptor tyrosine kinase-like orphan receptor 1; NB, neuroblastoma; GEO, Gene Expression Omnibus; ns, not significant (P>0.05).

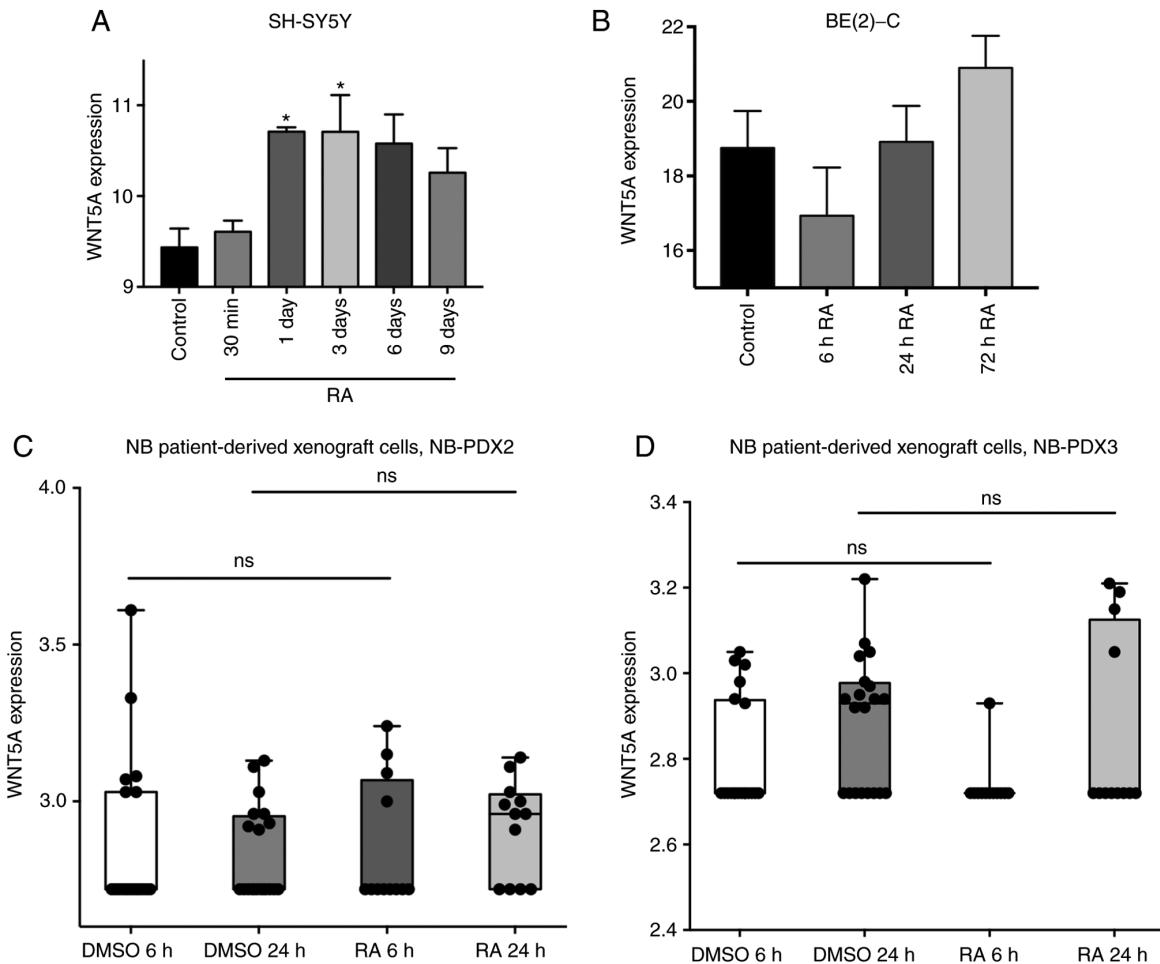


Figure S2. Individual baseline-corrected protein densitometry (ANOVA with Tukey's multiple comparison test to compare each condition with every other condition in the experiment, n=3. **P<0.005, ****P<0.0001. NT, not treated. (A) p-AKT; (B) p-GSK3 β ; (C) AKT; (D) GSK3 β ; (E) p- β -catenin; and (F) stabilized- β -catenin.

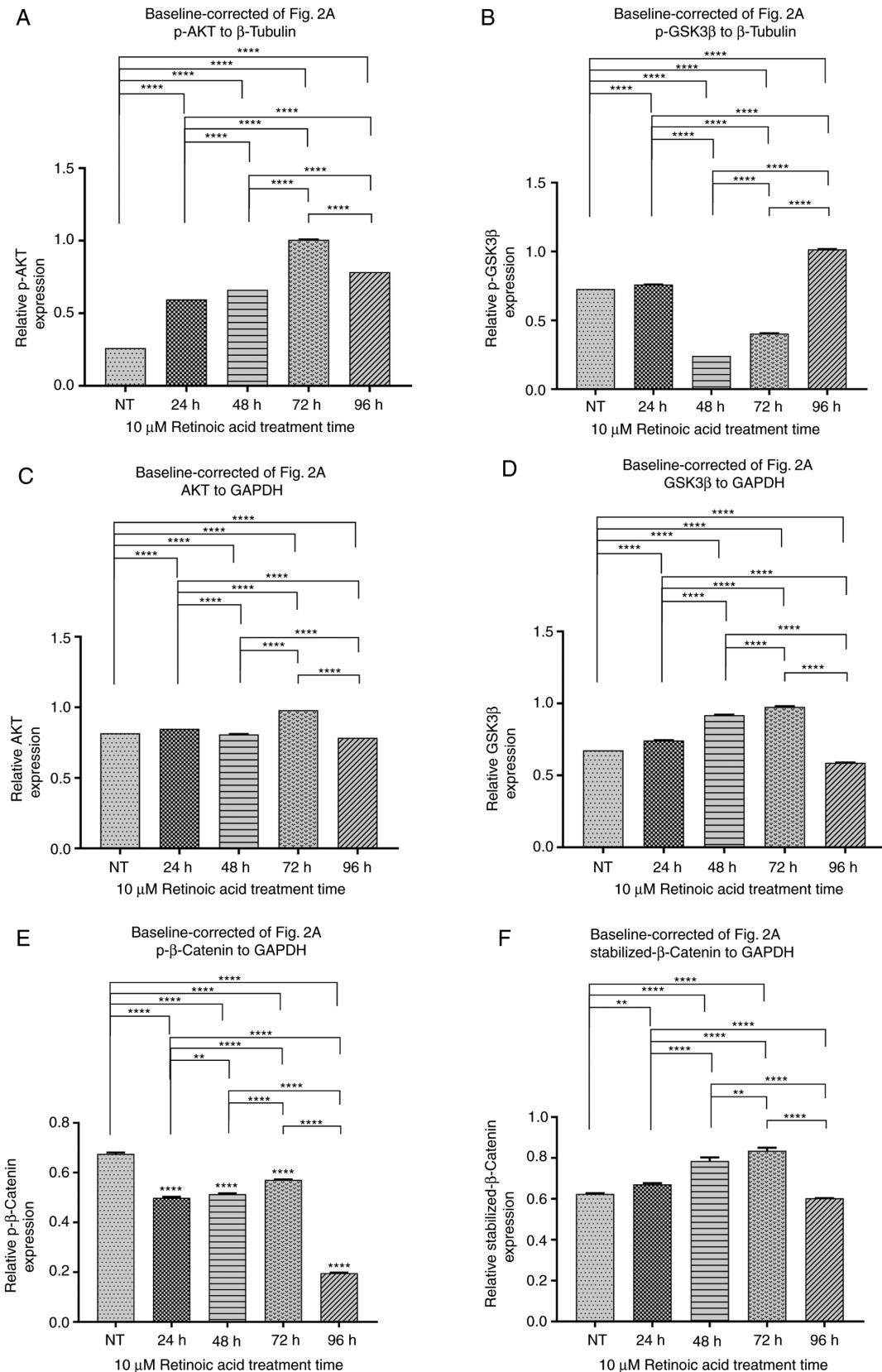


Figure S3. Individual baseline-corrected protein densitometry (ANOVA with Tukey's multiple comparison test to compare each condition with every other condition in the experiment, n=3, **P<0.005, ***P<0.0005, ****P<0.0001. (A) p-AKT; (B) AKT; (C) p-GSK3 β ; and (D) GSK3 β . ROR1, receptor tyrosine kinase-like orphan receptor 1; shROR1, ROR1-knockdown by shRNA; NT, not treated.

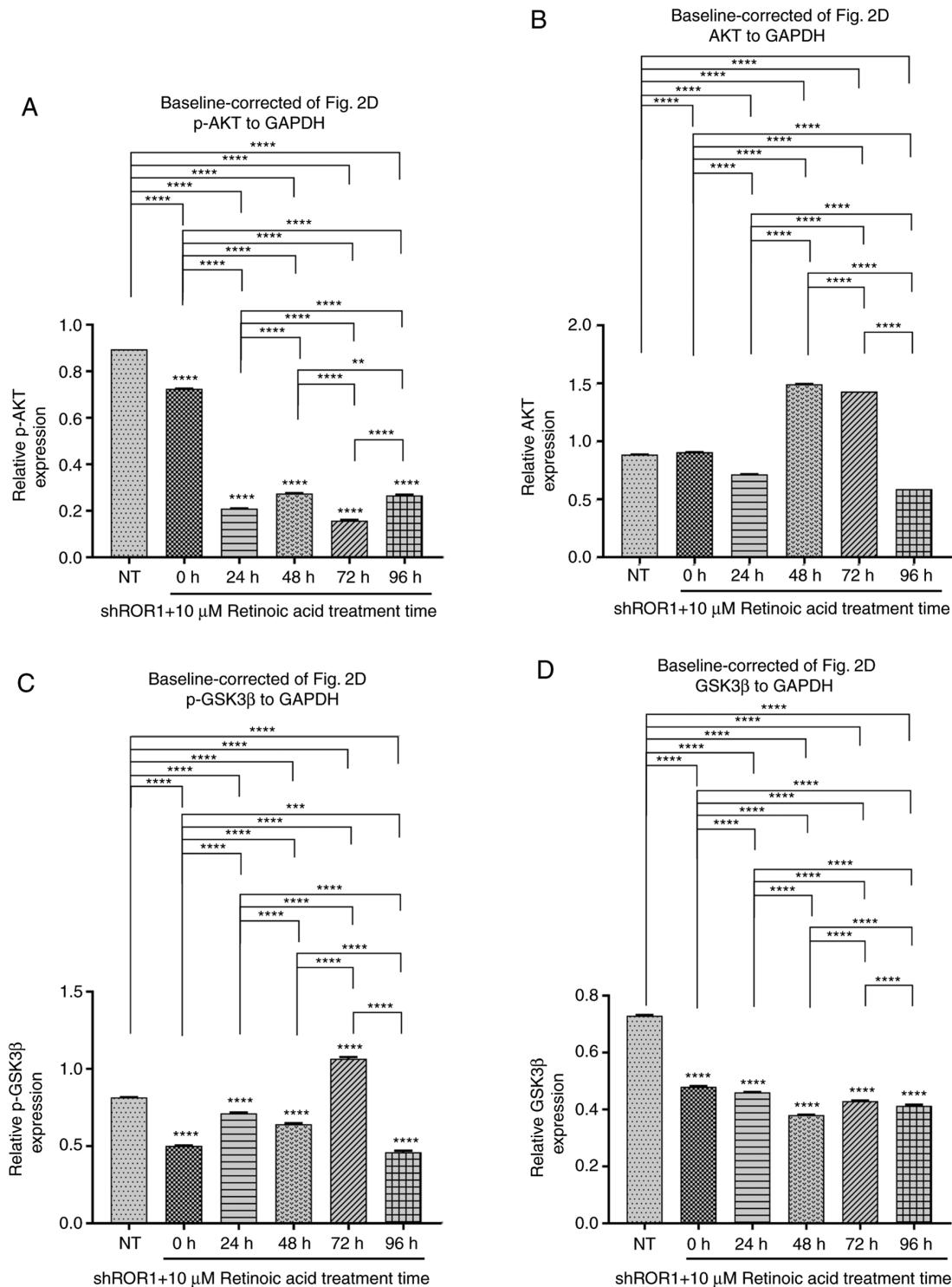


Figure S4. ROR1 RT-qPCR fold changes in response to pROR1 transfection after 96-h RA treatment in relation to DMSO control confirming success of transfection (n=3). ROR1, receptor tyrosine kinase-like orphan receptor 1; pROR, ROR1-overexpressing plasmid; RT-qPCR, real-time quantitative PCR.

