

SUPPLEMENTAL FIGURES AND TABLES

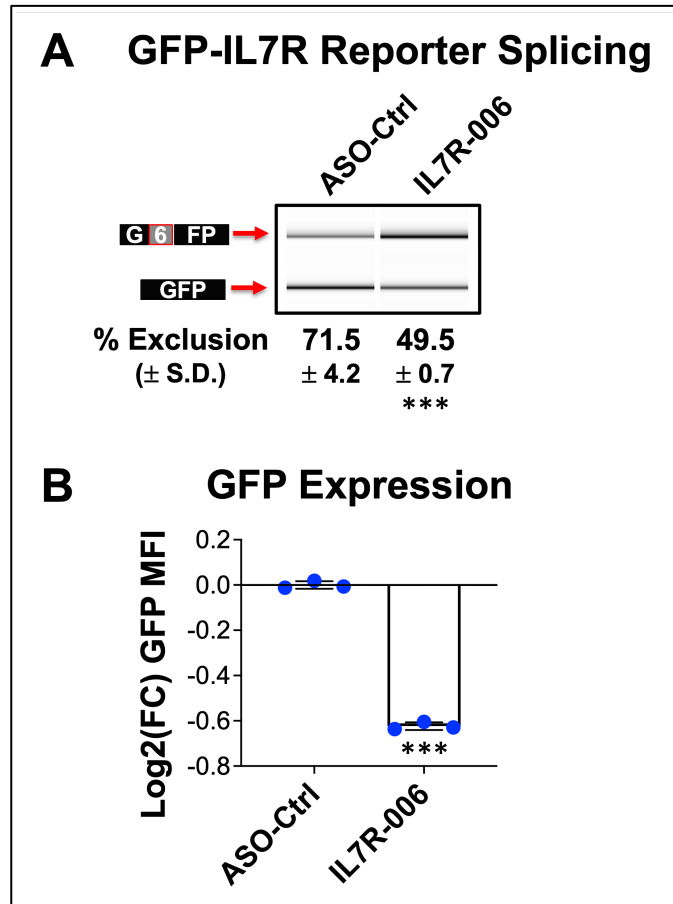


Figure S1. ASO IL7R-006 reduces IL7R exon 6 exclusion in GFP-IL7R reporter. Control (ASO-Ctrl) or IL7R-006 morpholino ASOs were transfected at 10 μ M into the HeLa cell line stably expressing the wild-type GFP-IL7R reporter with the Endo-Porter transfection reagent, and the cells were assayed 2 days after for IL7R exon 6 splicing and GFP expression. (A) GFP-IL7R reporter splicing. Percentage of exon 6 exclusion in transcripts from reporter was quantified by RT-PCR and is shown as mean $\pm$ S.D. for each ASO under the gel image. (B) GFP Expression. Expression of GFP was quantified as mean fluorescence intensity (MFI) by flow cytometry and is shown as Log2(FC) relative to ASO-Ctrl (mean $\pm$ S.D.). Statistical significance in all panels was assessed by Student's t-test pairwise comparison against control (***) $p < 0.001$. The data is shown for one representative experiment in triplicate wells (n=3 per condition) out of two independent experiments with similar results.

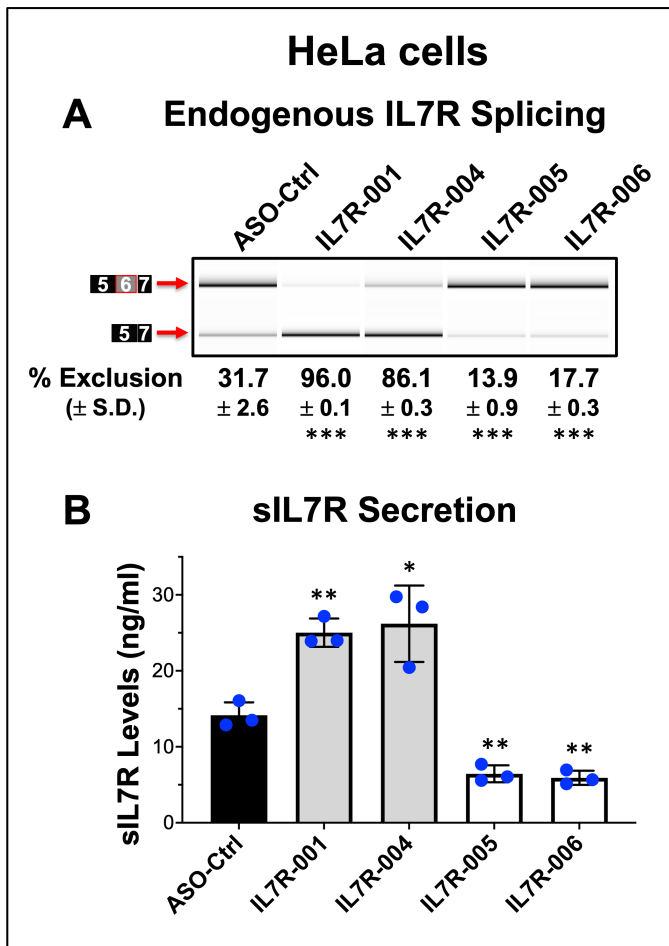


Figure S2. Lead ASOs modulate sIL7R secretion in HeLa cells. Morpholino ASOs of interest (ASO-Ctrl, IL7R-001, IL7R-004, IL7R-005 and IL7R-006) were transfected at 10 μ M into HeLa cells with the Endo-Porter transfection reagent, and the cells were assayed 3 days after for IL7R exon 6 splicing and sIL7R secretion. (A) *Endogenous IL7R splicing*. Percentage of exon 6 exclusion in transcripts from the endogenous IL7R gene was quantified by RT-PCR and is shown as mean $\pm$ S.D. for each ASO under the gel image. (B) *Secretion of sIL7R*. Levels of secreted sIL7R (mean $\pm$ S.D.) were quantified by ELISA in supernatants from cells in panel A. Statistical significance in all panels was assessed by Student's t-test pairwise comparison against control (* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$). The data is shown for one representative experiment in triplicate wells (n=3 per condition) out of two independent experiments with similar results.

Table S1. Sequence of IL7R-targeting morpholino ASOs used in this study.

ASO Name	ASO Sequence (5'-3')	Notes
ASO-Ctrl	CCTCTTACCTCAGTTACAATTTATA	Gene Tools Standard Control
IL7R-001	CTTTATTAGTTGAAGAAGGTCACCT	Targets 5'ss of exon 6
IL7R-002	CTCAAAATGCTGATG	Targets ESE2
IL7R-003	GACCAACAGAGCGACAGAGAAAAAA	Targets ESS2 and ESS3
IL7R-004	ACAGAGCGACAGAGA	Targets the sequence between ESS2 and ESS3
IL7R-005	GACCAACAGAGCGAC	Targets ESS3
IL7R-006	CACAATCACCTCTTTATTA	Targets ISS1