



Figure S3. Cloning strategy for IVT plasmid templates based on pJAZZ-OK (Details described in Methods section 1). **a.** Schematic of commercial pJAZZ-OK linear bacterial plasmid derived from N15 bacteriophage genome (*telN* – protelomerase gene, *repA* – replication factor gene and origin of replication, *cB* – the primary replication repressor protein, *Kan^R* – kanamycin resistance gene, black semi-circles denoting terminal hairpin loops); **b.** Schematic of linear plasmid with *ColE1* origin of replication (*ori*, yellow arrow) followed by *SmaI* restriction site (grey block); **c.** Schematic of plasmid contained backbone sequences for IVT: T7-promoter (*T7P*, white triangle), human *HBA1* 5' and 3' UTRs (blue and plum blocks, respectively) cleaved by *SmaI* site, 2x strong translation terminator (*Stop*, red octagon), 100-nt poly(A)-tail (orange block) followed by *BsmBI* restriction site (cyan rhombus); **d.** Schematic of resulted linear plasmid with open reading frame of luciferase or B11 antibody (*GOI ORF*, green arrow).