



Figure S1: CBs and HLBs are distinct nuclear bodies in zebrafish embryos.

(A) U2 snRNA and U7 snRNA localize to distinct bodies. Single confocal section of 4hpf zebrafish embryos labeled with microinjected U7 and U2 snRNA (green and red in the merged panel, respectively). Scale bar equals 10 μm . Arrowheads point to the nucleus shown 2x magnified in the inset. (B) Immunostaining for SLBP (red in the merged panel) and Coilin (green in the merged panel) shows that HLBs and CBs are distinct bodies. A single confocal section is displayed. Scale bar equals 10 μm . Arrowheads point to the nucleus shown 1.5x magnified in the inset. (C) Immunostaining for SLBP (red in the merged panel) shows the concentration of SLBP in the same foci as those marked by injected U7 snRNA (green). Scale bar equals 10 μm . Area marked by square is shown 4x magnified in the inset. (D) Quantification of overlapping signals between HLBs and CBs (U2 and U7 snRNAs, as in A; $n=13$ nuclei). Distribution, mean number (dashed line) and median number (bold line) are shown. (E) Quantification of HLBs colocalized with CBs (SLBP and Coilin immunostaining, as in (B); data from $n=40$ nuclei from 2 independent experiments at 4hpf). Distribution, mean number (dashed line) and median number (bold line) are shown. (F) Quantification of colocalization of SLBP foci and U7 foci (immunostaining as in Figure 2B and S1C; data from $n=9$ nuclei at blastula stage. Distribution, mean number (dashed line) and median number (bold line) are shown.)

Table S1: Primers used in this study		
Name	Sequence (5' > 3')	purpose
T7_hU2snRNA_for	TAATACGACTCACTATAGGGATCGCTTC TCGGCCTTTTGGCTAAG	generate U2 IVT template
hU2snRNA_rev	TGGTGCACCGTTCCTGGAGGTACTGCAA TACC	generate U2 IVT template
T7-U4 for	TAATACGACTCACTATAGGGAGCTTTGC GCAGTGGCAGTATCGTAGC	generate U4 IVT template
U4wtModII rev	CAGTCTCCGTAGAGACTGTCA	generate U4 IVT template
T7-mMU7-anti	AGGGGTTTTCCGACCGAAGTCAGAAAA CCTGCTAGACAAATTCTAAAAGAGCTGT AACACTTCCCTATAGTGAGTCGTATTA	generate mU7 IVT template
T7-promoter	TAATACGACTCACTATAGGG	T7 promoter for IVT
T7-zfU7-anti	ATGGGTTTCCTTTTAAAGGAAACCTACT GGACAAATAGTAAAAGAGATATTTTCC AACCTATAGTGAGTCGTATTA	generate zfU7 IVT template
T7-U7OPTanti	AGGGGTTTTCCGACCGAAGTCAGAAAA CCTGCTCCAAAAATTCTAAAAGAGCTGT AACACTTCCCTATAGTGAGTCGTATTA	generate U7smOPT IVT template
T7-U7OPT	TAATACGACTCACTATAGGGAAGTGTTA CAGCTCTTTTAGAATTTTGGAGCAGGTT TTCTGACTTCGGTCGGAAAACCCCT	generate U7smOPT IVT template
zfU7-A_mutant	ATGGGTTTCCTTTTAAAGGAAACCTACT GGACAAATAGTAAAAGAGATAAAAACC AACCTATAGTGAGTCGTATTA	generate U7-A-mutant IVT template
zfU7-HDE_mutant	ATGGGTTTCCTTTTAAAGGAAACCTACT GGACAAATACTACCGAAGTCACCTGTG GCCCTATAGTGAGTCGTATTA	generate U7-HDE-mutant IVT template
5'-ETS-18S-rRNA_F	TCTCTCCTCTACCACTCTGCTC	pre-rRNA quantitation
5'-ETS-18S-rRNA_R	GCCGTGTGCACTTAGACCT	pre-rRNA quantitation
ND3-ND4I mtRNA_F	CCTACGAATGAGCCCAAGG	normalization of qPCR data
ND3-ND4I mtRNA_R	CGGTGAAATGTAAGTCCTGCT	normalization of qPCR data