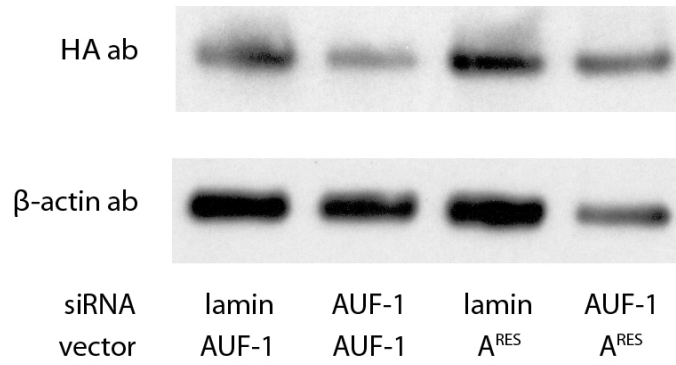


SUPPLEMENTAL FIGURES

WT: CTGGG
WT: *taagctcgctttcttgctgtccaatttctattaaggttcctttgttccttaagtccaactactaaactgggggatattatgaaggcccttgagcatctggattctgcctaataaaaaacatttatttcattgcaaaaaaaaaaaaaaaaa*
XM: *taagctcgctttcttgctgtccaatttctattaaggttcctttgttccttaagtccaactactaaagacccggatattatgaaggcccttgagcatctggattctgcctaataaaaaacatttatttcattgcaaaaaaaaaaaaaaaaa*
XM: GACCC

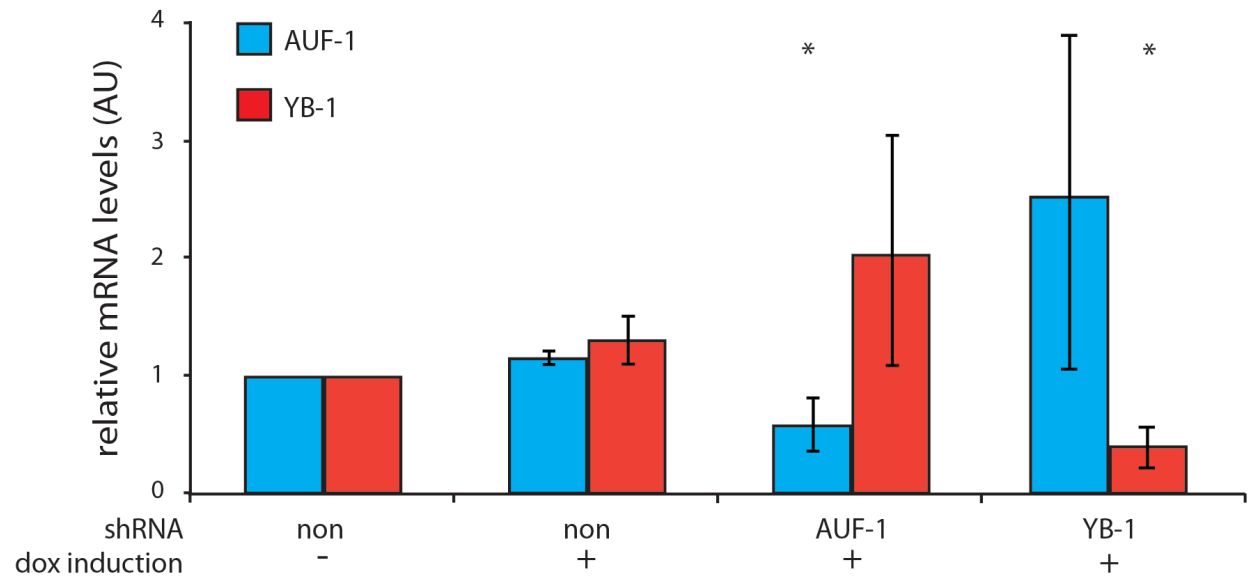
Supplemental Figure 1. Comparison of β^{WT} and β^{XM} 3'UTR sequences.

The location and the composition of the 5-nt XM mutation (GACCC), the translation termination codon (*taa*), and poly(A) tail (aaa) are indicated.



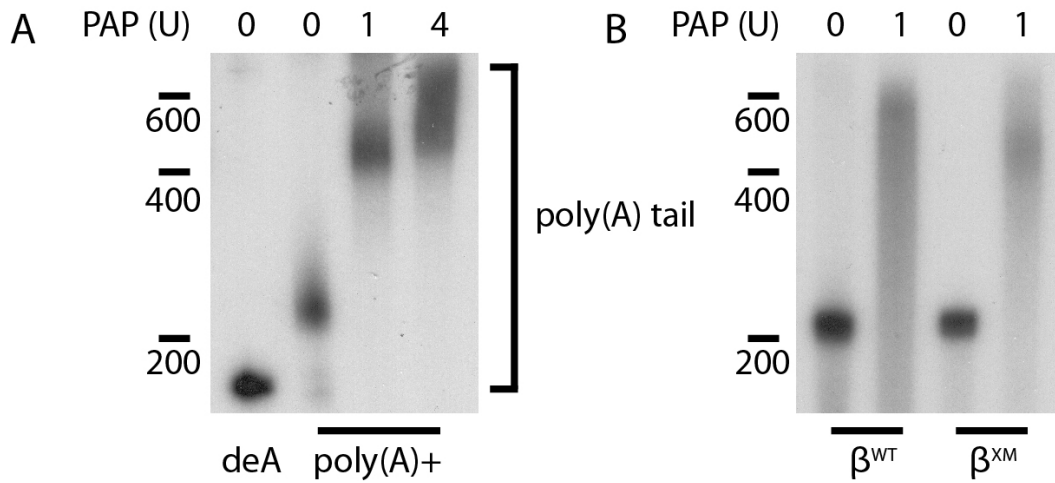
Supplemental Figure 2. Translation of wild-type and siRNA-resistant HA-AUF-1 mRNAs.

K562 cells were co-transfected with siRNAs targeting AUF-1 or control lamin mRNAs, and with vectors encoding either wild-type HA-AUF-1 (AUF-1) or siRNA-resistant HA-AUF-1 (A^{RES}). Protein extracts were subjected to Western transfer analysis using HA and control actin antibodies.



Supplemental Figure 3. Efficacy and specificity of shRNA-mediated knock-down of AUF-1 and YB-1.

Experiments used K562 cells that stably expressed dox-inducible shRNAs targeting AUF-1 mRNA, YB-1 mRNA, or a control non-silencing RNA sequence. shRNA expression was induced with dox and cells harvested 72 hr later. RT-qPCR quantifications were conducted with AUF-1- and YB-1-specific primers, and values normalized to the average values for control GAPDH and β -actin mRNAs. The level of each mRNA in uninduced cells transduced with the non-silencing shRNA was arbitrarily assigned unit value. Bars represent the mean \pm SEM values for 3 independent experiments. * p <0.05 relative to cells transduced with the non-silencing shRNA.



Supplemental Figure 4. Generation of β -globin 3'UTR probes with variable poly(A) tail lengths.

(A) A [^{32}P]-labeled β -globin 3'UTR RNA probe containing a 18-nt poly(A) tail was incubated for 10 min at 37°C with ATP and either 1 U or 4 U of poly(A) polymerase (PAP). Reactions were analyzed on a 6%/8M polyacrylamide/urea gel. Marker on the left indicates RNA length in nucleotides.

(B) As in panel A: [^{32}P]-labeled β^{WT} and β^{XM} 3'UTR probes containing 18-nt poly(A) tails were incubated with 1 U PAP and resolved by denaturing polyacrylamide electrophoresis.