

Supplemental Figure S1

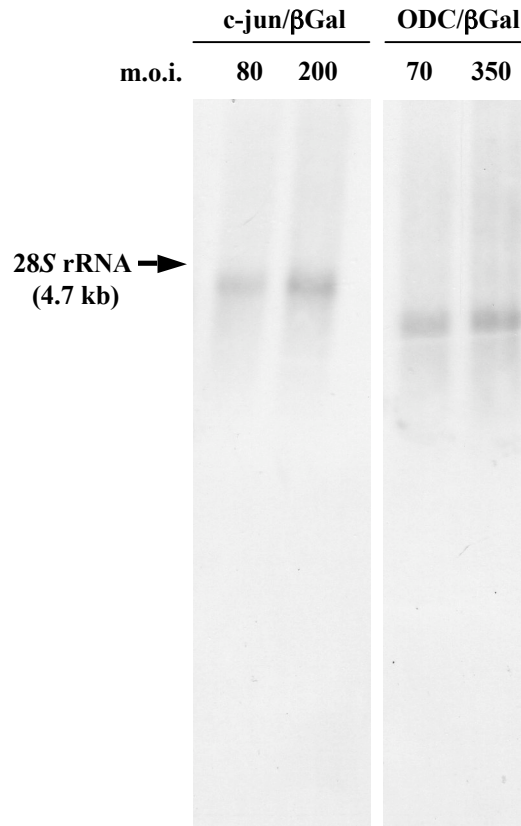


Figure S1. Expression of β Gal reporter mRNAs in adult cardiocytes. Cardiocytes were infected with reporter adenovirus at the indicated m.o.i. Total RNA was extracted after 48 h, and approximately 10 μ g per lane was used for Northern blotting with a cDNA probe for β Gal mRNA. The arrows indicate the position of 28S rRNA as detected by staining with ethidium bromide. Similar results were obtained in two additional experiments.

Supplemental Figure S2

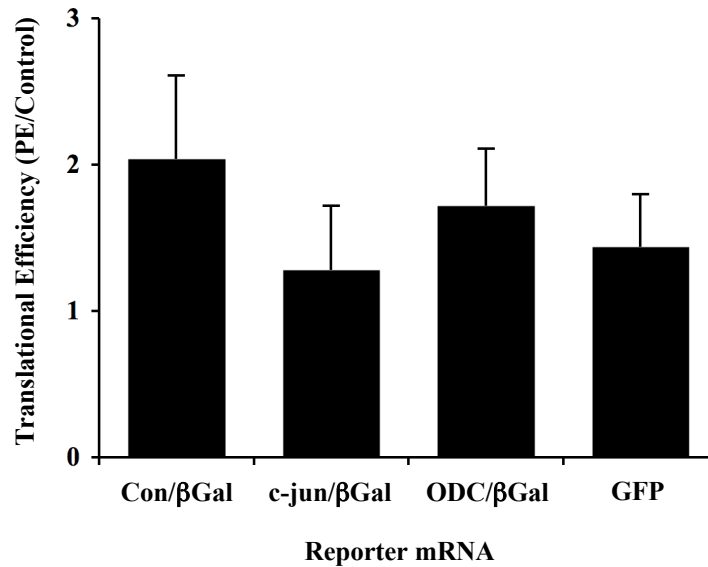


Figure S2. Effects of the α_1 -adrenergic agonist PE on translational efficiency of reporter mRNAs. Quiescent cardiocytes were infected with increasing titers of either Con/ β Gal, c-jun/ β Gal or ODC/ β Gal adenovirus and subsequently maintained over 48 h in the presence or absence of 10 μ M PE. Translational efficiency of each reporter mRNA (protein/mRNA) in PE-treated cardiocytes was normalized to its companion group of non-treated controls. Values are the mean \pm S.E., n=4 experiments.

Supplemental Figure S3

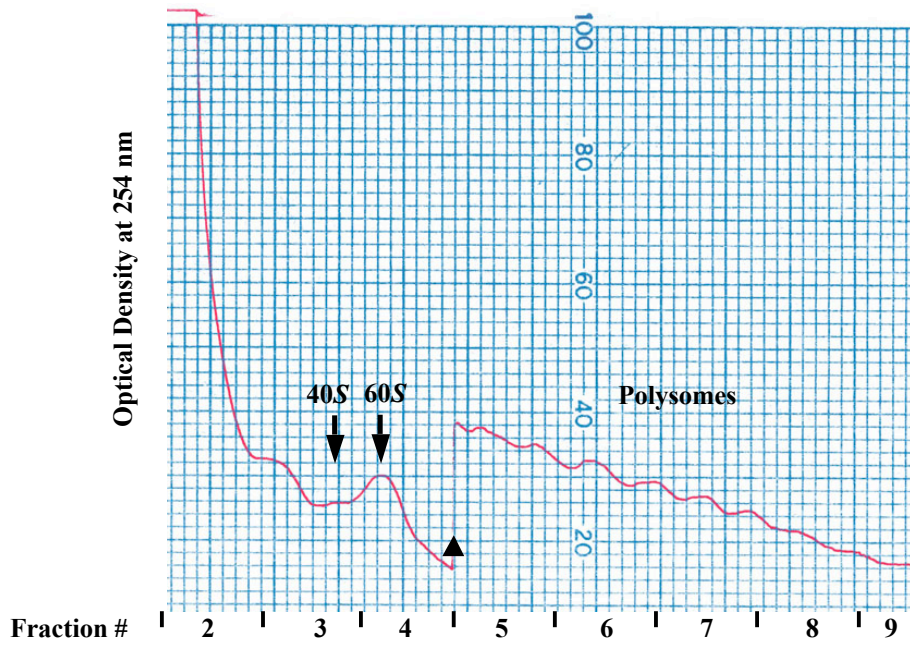


Figure S3. Representative absorbance profile of cardiocyte homogenates resolved on 15% to 50% linear sucrose gradients. Individual fractions are delineated along the bottom of the trace. Fraction 1 (not shown) is off the scale. The arrowhead indicates that the sensitivity of the detector was increased by a factor of 2.5 to better visualize the size of individual polysomes.

Table 1. Primers used for quantifying RNA levels in cardiocytes by real-time RT-PCR

RNA	Primer Sequences	PCR Product (bp)
β Gal mRNA	2445-Forward 5'-CGACATTGGCGTAAGTGAAGC-3'	139
	2584-Reverse 5'-TCGTAATCAGCACCGCATCAG-3'	
GFP mRNA	346-Forward 5'-CTCGATGCGGTTACCCAGG-3'	180
	526-Reverse 5'-GACCTACGGCGTGCAGTGC-3'	
18S rRNA	110-Forward 5'-TATGGTTCCTTTGGTCGCTC-3'	130
	240-Reverse 5'GGTTGGTTTTGATCTGATCTGATAAAT-3'	
GAPDH mRNA	354-Forward 5'-AGGTCATCCCAGAGCTGAAC-3'	137
	491-Reverse 5'-CCTGCTTCACCACCTTCTTG-3'	

Table 2. Structural features of 5'-UTRs of mRNAs encoding transcription factors

5'-UTR	2° Structure (ΔG)	G+C (%)	Length (nt)
GATA4	-85	51.5	301
Serum Response Factor (SRF)	-195	79.1	358
Upstream Binding Factor (UBF1 & UBF2)	-121	62.0	266
Nuclear Factor of Activated T Cells (NF-ATc)	-130	80.3	239
c-myc	-249	64.5	558
c-fos	-44	64.5	152
MEF2C	-121	46.5	426
MEF2D	-161	68.7	390
Myocardin	-112	64.0	292