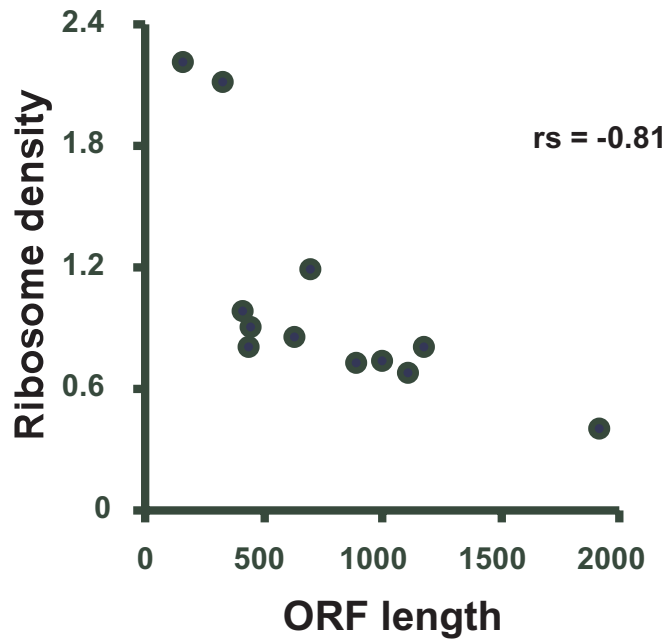


Supplemental figure 9

Inverse correlation between ORF length and ribosome density observed by Northern analysis in mouse cells



Cataldo L. et. al. (1999 Mol. Human Reproduction, **5**: 206-213) analyzed the ribosomal association of several mouse mRNAs by Northern analysis (listed below). The ribosome density for each ORF length is plotted. The plot reveals an inverse correlation (Spearman rank (rs) of -0.81), similar to the one we observe in yeast using DNA microarrays. Excluding the data point for PolyA binding protein (1908 nts) had a negligible effect on the correlation ($rs = -0.75$).

length(aa)	spacing	length (nts)	# ribosomes	Density	name
207	115	621	5.4	0.9	Histone
366	145	1098	7.6	0.7	Inhibin
331	133	993	7.5	0.8	Lactate dehydrogenase
295	136	885	6.5	0.7	Laminin receptor
230	83	690	8.3	1.2	27kDa
636	242	1908	7.9	0.4	PolyA binding protein
51	45	153	3.4	2.2	Protamine 1
106	47	318	6.8	2.1	Protamine 2
388	122	1164	9.5	0.8	Pyrovate dehydrogenase
135	101	405	4.0	1.0	RPL 32
145	109	435	4.0	0.9	RPS16
143	122	429	3.5	0.8	Cysteine rich protein