

**Supplementary Table 3.** The proportion of genes that contain uORFs in the 5'UTR is much greater for iESR genes than rESR genes. We downloaded the number of uORFs in the 5'UTR of 4149 genes from Lawless et al. [1]. Among 281 iESR genes, only 252 genes have uORFs data. Among 585 rESR genes, only 450 genes have uORFs data. We found that the proportion of genes that contain uORFs in the 5'UTR is statistically greater for iESR genes than rESR genes ( $p$ -value calculated by the two sample proportion test).

The proportion of genes that contain uORFs in the 5'UTR of iESR genes (denoted as <b>prop1</b> )	The proportion of genes that contain uORFs in the 5'UTR of rESR genes (denoted as <b>prop2</b> )	$p$ -value of claiming <b>prop1 &gt; prop2</b> (calculated by two sample proportion test)
11.90% (30/252)	4.89% (22/450)	5.677E-04

## References

1. Lawless,C., Pearson,R.D., Selley,J.N. *et al.* (2009) Upstream sequence elements direct post-transcriptional regulation of gene expression under stress conditions in yeast. BMC Genomics,**10**, 7.