

**Supplemental Table S3. Detection of translated genes or iORFs.**

Strain	Genes peak	Genes phasing <sup>1</sup>	iORFs peak	iORFs phasing <sup>1</sup>
YPS128 ( <i>S. cer</i> )	4,113 (86.1%)	3,866 (94.0%)	101 (8.4%)	37 (36.6%)
YPS744 ( <i>SpA</i> )	4,218 (88.3%)	3,831 (90.8%)	736 (7.6%)	194 (26.3%)
MSH-604 ( <i>SpB</i> )	3,581 (75.0%)	3,293(92.0%)	172 (1.8%)	58 (33.7%)
MSH-587-1 ( <i>SpC</i> )	4,231 (88.6%)	3,984 (94.0%)	554 (5.7%)	199 (35.9%)
Total (without redundancy if shared between strains)	4,590	4,445	1,346	447

<sup>1</sup> Number of iORFs or genes with a significant trinucleotide periodicity in ribosome profiling data among those with an initiation peak