

Supp. Figure 3A

<i>S. uvarum</i>	CAACATAAACA <b>ATG</b> TCTTACAATTTTACAGGTACGCCACGGGCGAAGGAACGGGTGGTA	60
<i>S. cerevisiae</i>	CAATATCAACA <b>ATG</b> TCTTACAATTTTACAGGTACGCCTACAGGCCAAGGAACGGGTGGTA	60
GSY2532 (Vessel A)	CAATATCAACA <b>ATG</b> TCTTACAATTTTACAGGTACGCCTACAGGCCAAGGAACGGGTGGTA	60
GSY2533 (Vessel B)	CAATATCAACA <b>ATG</b> TCTTACAATTTTACAGGTACGCCTACAGGCCAAGGAACGGGTGGTA	60
GSY2535 (Vessel C)	CAATATCAACA <b>ATG</b> TCTTACAATTTTACAGGTACGCCTACAGGCCAAGGAACGGGTGGTA	60
	*** ** ***** ** *****	60
<i>S. uvarum</i>	ACTCATTGACCACAGACTTAAACACCCAATATGATTTGGCTAATATGGGATGGATCGGTG	120
<i>S. cerevisiae</i>	ACTCGTTGACAACAGATTTGAATACACAATTTGACTTGCCAACATGGGATGGATCGGTG	120
GSY2532	ACTCGTTGACAACAGATTTGAATACACAATTTGACTTGCCAACATGGGATGGATCGGTG	120
GSY2533	ACTCGTTGACAACAGATTTGAATACACAATTTGACTTGCCAACATGGGATGGATCGGTG	120
GSY2535	ACTCGTTGACAACAGATTTGAATACACAATTTGACTTGCCAACATGGGATGGATCGGTG	120
	**** ***** ** ** ** ***** ** ***** ** *****	120
<i>S. uvarum</i>	TAGCTTCCGCAGGTGTCTGGATTATGGTGCCAGGTATCGGTCTGTTATACTCCGGTTTGT	180
<i>S. cerevisiae</i>	TGGCTTCAGCAGGTGTGTGGATTATGGTCCCAGGTATCGGTTTATTATATTCTGGTTTAT	180
GSY2532	TGGCTTCAGCAGGTGTGTGGATTATGGTCCCAGGTATCGGTTTATTATATTCTGGTTTAT	180
GSY2533	TGGCTTCAGCAGGTGTGTGGATTATGGTCCCAGGTATCGGTTTATTATATTCTGGTTTAT	180
GSY2535	TGGCTTCAGCAGGTGTGTGGATTATGGTCCCAGGTATCGGTTTATTATATTCTGGTTTAT	180
	* ***** ***** ***** ***** * ***** ** ***** *	180
<i>S. uvarum</i>	CTAGGAAAAGCAGCCTTATCTTTGCTTTGGGCCTCGATGATGGCCTCTGCAGTGTGTA	240
<i>S. cerevisiae</i>	CCAGGAAAAGCATGCTTTATCCTTGCTTTGGGCCTCGATGATGGCTTCCGCCGTGTGTA	240
GSY2532	CCAGGAAAAGCATGCTTTATCCTTGCTTTGGGCCTCGATGATGGCTTCCGCCGTGTGTA	240
GSY2533	CCAGGAAAAGCATGCTTTATCCTTGCTTTGGGCCTCGATGATGGCTTCCGCCGTGTGTA	240
GSY2535	CCAGGAAAAGCATGCTTTATCCTTGCTTTGGGCCTCGATGATGGCTTCCGCCGTGTGTA	240
	* ***** ***** ***** ***** ** ** *****	240
<i>S. uvarum</i>	TCTTCCAGTGGTTTTTCTGGGGTATTTCGCTGGCCTTCTCACATAACACTAGAGGTCATG	300
<i>S. cerevisiae</i>	TTTTCCAATGGTTTTTCTGGGGATACTCATTAGCTTTCTCACACAACACTAGAGGTAACG	300
GSY2533	TTTTCCAATGGTTTTTCTGGGGATACTCATTAGCTTTCTCACACAACACTAGAGGTAACG	300
GSY2532	TTTTCCAATGGTTTTTCTGGGGATACTCATTAGCTTTCTCACACAACACTAGAGGTAACG	300
GSY2535	TTTTCCAATGGTTTTTCTGGGGATACTCATTAGCTTTCTCACACAACACTAGAGGTAACG	300
	* ***** ***** ** ** * ** ***** ***** ** *	300
<i>S. uvarum</i>	GTTTCATTGGTACTTTGGAATCCTTTCGGGTTCCGTAACGTTTTGGGGCTCCCTCCAGTG	360
<i>S. cerevisiae</i>	GTTTTATTGGTACCTTGAATCCTTTGGGTTTCGTAACGTTTTAGGAGCCCCATCTAGTG	360
GSY2532	GTTTTATTGGTACCTTGAATCCTTTGGGTTTCGTAACGTTTTAGGAGCCCCATCTAGTG	360
GSY2533	GTTTTATTGGTACCTTGAATCCTTTGGGTTTCGTAACGTTTTAGGAGCCCCATCTAGTG	360
GSY2535	GTTTTATTGGTACCTTGAATCCTTTGGGTTTCGTAACGTTTTAGGAGCCCCATCTAGTG	360
	**** ***** ***** ***** ***** ***** ** ** ** **	360
<i>S. uvarum</i>	TCAGCTCATTGCCTGACATCTTATTTGCTGTTTACCAAGGTATGTTTGCCGCCGTCACCG	420
<i>S. cerevisiae</i>	TCAGTTCTCTTCCCGATATACTGTTTGCCGTTTACCAAGGTATGTTTGCCGCAGTCACCG	420
GSY2532	TCAGTTCTCTTCCCGATATACTGTTTGCCGTTTACCAAGGTATGTTTGCCGCAGTCACCG	420
GSY2533	TCAGTTCTCTTCCCGATATACTGTTTGCCGTTTACCAAGGTATGTTTGCCGCAGTCACCG	420
GSY2535	TCAGTTCTCTTCCCGATATACTGTTTGCCGTTTACCAAGGTATGTTTGCCGCAGTCACCG	420
	**** ** * ** * * * ***** ***** ***** *****	420
<i>S. uvarum</i>	GTGCCCTAATGTTGGGTGGTGCTTGCAGAGGGCAAGACTGTTCCCATGATGGTGTCT	480
<i>S. cerevisiae</i>	GTGCCCTAATGCTAGGTGGTGCTTGCAGAGGGCAAGGTTGTTTCCTATGATGGTGTCT	480
GSY2532	GTGCCCTAATGCTAGGTGGTGCTTGCAGAGGGCAAGGTTGTTTCCTATGATGGTGTCT	480
GSY2533	GTGCCCTAATGCTAGGTGGTGCTTGCAGAGGGCAAGGTTGTTTCCTATGATGGTGTCT	480
GSY2535	GTGCCCTAATGCTAGGTGGTGCTTGCAGAGGGCAAGGTTGTTTCCTATGATGGTGTCT	480
	***** * ***** ***** ** ***** ** ***** ** *****	480





Supp. Figure 3A

<i>S. uvarum</i>	ACACAGACGCAGAAAAGAATTCCACGCCTTCTGATGTTTCTTCTACCAAGAACACTGACC	1500
<i>S. cerevisiae</i>	ACACAGACGCAGAAAAGAATTCTACGCCTTCCGACGCTTCTTCTACTAAGAACACTGACC	1500
GSY2532	ACACAGACGCAGAAAAGAATTCCACGCCTTCTGATGTTTCTTCTACCAAGAACACTGACC	1500
GSY2533	ACACAGACGCAGAAAAGAATTCCACGCCTTCTGATGTTTCTTCTACCAAGAACACTGACC	1500
GSY2535	ACACAGACGCAGAAAAGAATTCCACGCCTTCTGATGTTTCTTCTACCAAGAACACTGACC	1500
	***** ** * *****	1500
<i>S. uvarum</i>	ATATAGTATAATGATATACCCGTACAGACTATGCTCTTATTTTTTACTCATTATGTAATC	1560
<i>S. cerevisiae</i>	ATATAGTATAATGATATACTCAAGCAGACTATGATTTA-TGTTAATCTTTATGTAACG	1560
GSY2532	ATATAGTATAATGATATACCCGTACAGACTATGCTCTTATTTTTTACTCATTATGTAATC	1560
GSY2533	ATATAGTATAATGATATACCCGTACAGACTATGCTCTTATTTTTTACTCATTATGTAATC	1560
GSY2535	ATATAGTATAATGATATACCCGTACAGACTATGCTCTTATTTTTTACTCATTATGTAATC	1560
	***** * ***** * ** * *****	1560

Supp. Figure 3B

*S. uvarum* MSYNFTGTPTGEGTGGNSLTTDLNTQYDLANMGWIGVASAGVWIMVPGIGLLYSGLSRKK 60  
*S. cerevisiae* MSYNFTGTPTGEGTGGNSLTTDLNTQFDLANMGWIGVASAGVWIMVPGIGLLYSGLSRKK 60  
GSY2532 MSYNFTGTPTGEGTGGNSLTTDLNTQFDLANMGWIGVASAGVWIMVPGIGLLYSGLSRKK 60  
GSY2533 MSYNFTGTPTGEGTGGNSLTTDLNTQFDLANMGWIGVASAGVWIMVPGIGLLYSGLSRKK 60  
GSY2535 MSYNFTGTPTGEGTGGNSLTTDLNTQFDLANMGWIGVASAGVWIMVPGIGLLYSGLSRKK 60  
\*\*\*\*\*:\*\*\*\*\* 60

*S. uvarum* HALSLLWASMMASAVCIFQWFFWGYSLAFSHNTRGHGFIGTLEFFGFRNVLGAPSSVSSL 120  
*S. cerevisiae* HALSLLWASMMASAVCIFQWFFWGYSLAFSHNTRGNNGFIGTLEFFGFRNVLGAPSSVSSL 120  
GSY2532 HALSLLWASMMASAVCIFQWFFWGYSLAFSHNTRGNNGFIGTLEFFGFRNVLGAPSSVSSL 120  
GSY2533 HALSLLWASMMASAVCIFQWFFWGYSLAFSHNTRGNNGFIGTLEFFGFRNVLGAPSSVSSL 120  
GSY2535 HALSLLWASMMASAVCIFQWFFWGYSLAFSHNTRGNNGFIGTLEFFGFRNVLGAPSSVSSL 120  
\*\*\*\*\*:\*\*\*\*\* 120

*S. uvarum* PDILFAVYQGMFAAVTGALMLGGACERARLFPMMVFLFLWMTVVYCP IACWVWNAEGWL V 180  
*S. cerevisiae* PDILFAVYQGMFAAVTGALMLGGACERARLFPMMVFLFLWMTIVYCP IACWVWNAEGWL V 180  
GSY2532 PDILFAVYQGMFAAVTGALMLGGACERARLFPMMVFLFLWMTVVYCP IACWVWNAEGWL V 180  
GSY2533 PDILFAVYQGMFAAVTGALMLGGACERARLFPMMVFLFLWMTIVYCP IACWVWNAEGWL V 180  
GSY2535 PDILFAVYQGMFAAVTGALMLGGACERARLFPMMVFLFLWMTIVYCP IACWVWNAEGWL V 180  
\*\*\*\*\*:\*\*\*\*\* 180

*S. uvarum* KLGSLDYAGGLCVHLTSGHGGLVYALILGRNDP VTRKGM PKYKPHSVTSVVLGT VFLWF 240  
*S. cerevisiae* KLGSLDYAGGLCVHLTSGHGGLVYALILGRNDP VTRKGM PKYKPHSVTSVVLGT VFLWF 240  
GSY2532 KLGSLDYAGGLCVHLTSGHGGLVYALILGRNDP VTRKGM PKYKPHSVTSVVLGT VFLWF 240  
GSY2533 KLGSLDYAGGLCVHLTSGHGGLVYALILGRNDP VTRKGM PKYKPHSVTSVVLGT VFLWF 240  
GSY2535 KLGSLDYAGGLCVHLTSGHGGLVYALILGRNDP VTRKGM PKYKPHSVTSVVLGT VFLWF 240  
\*\*\*\*\*.\*\*\*\*\* 240

*S. uvarum* GWMFFNGGSAGNATIRAWYSIMSTNLAAACGGLTWMVIDYFRSGR KWT VGLCSGIIAGL 300  
*S. cerevisiae* GWMFFNGGSAGNATIRAWYSIMSTNLAAACGGLTWMVIDYFRSGR KWT VGLCSGIIAGL 300  
GSY2532 GWMFFNGGSAGNATIRAWYSIMSTNLAAACGGLTWMVIDYFRSGR KWT VGLCSGIIAGL 300  
GSY2533 GWMFFNGGSAGNATIRAWYSIMSTNLAAACGGLTWMVIDYFRSGR KWT VGLCSGIIAGL 300  
GSY2535 GWMFFNGGSAGNATIRAWYSIMSTNLAAACGGLTWMVIDYFRSGR KWT VGLCSGIIAGL 300  
\*\*\*\*\*.\*\*\*\*\* 300

*S. uvarum* VGITPAAGFVPIWSAVVIGVVTGAGCNLAVDLKGLL GIDDGLDCYSIHGVGACIGCVLTG 360  
*S. cerevisiae* VGITPAAGFVPIWSAVVIGVVTGAGCNLAVDLKSLLRIDDGLDCYSIHGVGACIGCVLTG 360  
GSY2532 VGITPAAGFVPIWSAVVIGVVTGAGCNLAVDLKGLL GIDDGLDCYSIHGVGACIGCVLTG 360  
GSY2533 VGITPAAGFVPIWSAVVIGVVTGAGCNLAVDLKSLLRIDDGLDCYSIHGVGACIGCVLTG 360  
GSY2535 VGITPAAGFVPIWSAVVIGVVTGAGCNLAVDLKGLL GIDDGLDCYSIHGVGACIGCVLTG 360  
\*\*\*\*\*.\*\*\*.\*\*\*\* 360

*S. uvarum* IFAADYVNATAGSYISPIAGGWINKHYKQVGYQLAGMCAALAWTVTVTSILLVTMNAIPF 420  
*S. cerevisiae* IFAADYVNATAGSYISPIDGGWINHHYKQVGYQLAGMCAALAWTVTVTSILLVTMNAIPF 420  
GSY2532 IFAADYVNATAGSYISPIAGGWINKHYKQVGYQLAGMCAALAWTVTVTSILLVTMNAIPF 420  
GSY2533 IFAADYVNATAGSYISPIAGGWINKHYKQVGYQLAGMCAALAWTVTVTSILLVTMNAIPF 420  
GSY2535 IFAADYVNATAGSYISPIAGGWINKHYKQVGYQLAGMCAALAWTVTVTSILLVTMNAIPF 420  
\*\*\*\*\*:\*\*\*\*\*:\*\*\*\*\*:\*\*\*\*\* 420

*S. uvarum* LKLRLSADEEELGTDAAQIGEFITYEESTAYIPEPIRSRTSAQMPPPHETIDDKIVANTDA 480  
*S. cerevisiae* LKLRLSADEEELGTDAAQIGEFITYEESTAYIPEPIRSKTS AQMPPPHENIDDKIVANTDA 480  
GSY2532 LKLRLSADEEELGTDAAQIGEFITYEESTAYIPEPIRSRTSAQMPPPHETIDDKIVANTDA 480  
GSY2533 LKLRLSADEEELGTDAAQIGEFITYEESTAYIPEPIRSRTSAQMPPPHETIDDKIVANTDA 480  
GSY2535 LKLRLSADEEELGTDAAQIGEFITYEESTAYIPEPIRSRTSAQMPPPHETIDDKIVANTDA 480  
\*\*\*\*\*.\*\*\*\*\*.\*\*\*\*\*.\*\*\*\* 480

*S. uvarum* EKNSTPSDV SSKNTDHIV 499  
*S. cerevisiae* EKNSTPSDASSTKNTDHIV 499  
GSY2532 EKNSTPSDV SSKNTDHIV 499  
GSY2533 EKNSTPSDV SSKNTDHIV 499  
GSY2535 EKNSTPSDV SSKNTDHIV 499  
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