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| 1. **Correlations of other prion formers across Saccharomycetes for fLPS P-value compositional bias**

**Table S2: Trends for other prion-formers †(see footnote at end of document)** |
| **UniProtID +** **UniProtName** | **N** | **% polyN+****polyQ** | **% polyN** | **% polyQ** | **DNA GC%** | **% in proteome with –log fLPS P-value ≥8.0** | **% in proteome with –log fLPS P-value ≥10.0** | **% in proteome with –log fLPS P-value ≥12.0** |
| **Weighted (W) or Unweighted (UW)** |  | **W** | **UW** | **W** | **UW** | **W** | **UW** | **W** | **UW** | **W** | **UW** | **W** | **UW** | **W** | **UW** |
| P12383 PDR1\_YEAST | 22 | 0.543\* | 0.410 | 0.559\* | 0.429\* | 0.197 | 0.127 | -0.490\* | -0.409 | 0.597\* | 0.385 | 0.603\* | 0.384 | 0.592\* | 0.383 |
| P14907 NSP1\_YEAST  | 57 | 0.349\* | 0.319 \* | 0.382\* | 0.350\* | 0.074 | 0.068 | -0.384\* | -0.321\* | 0.374\* | 0.336\* | 0.350\* | 0.319\* | 0.326\* | 0.304\* |
| P18494 GLN3\_YEAST\*\*\* | 58 | 0.836\*\*\* | 0.615 \*\*\* | 0.888\*\*\* | 0.701\*\*\* | 0.200 | 0.092 | -0.593\*\*\* | -0.397\* | 0.867\*\*\* | 0.666\*\*\* | 0.878\*\*\* | 0.698\*\*\* | 0.878\*\*\* | 0.723\*\*\* |
| P32770 NRP1\_YEAST\*\*\* | 63 | 0.624\*\*\* | 0.553 \*\*\* | 0.681\*\*\* | 0.592\*\*\* | 0.115 | 0.172 | -0.482\*\*\* | -0.433\*\*\* | 0.643\*\*\* | 0.525\*\*\* | 0.657\*\*\* | 0.541\*\*\* | 0.676\*\*\* | 0.567\*\*\* |
| P32831 NGR1\_YEAST | 55 | 0.178 | 0.212 | 0.081 | 0.138 | 0.259 | 0.247 | -0.236 | -0.264 | 0.153 | 0.197 | 0.158 | 0.203 | 0.155 | 0.201 |
| P38180 YBI1\_YEAST\*\*\* | 27 | 0.647\*\*\* | 0.646 \*\*\* | 0.622\*\* | 0.626\*\*\* | 0.225 | 0.215 | -0.674\*\*\* | -0.687\*\*\* | 0.575\* | 0.536\* | 0.554\* | 0.516\* | 0.537\* | 0.503\* |
| P38216 YBM6\_YEAST | 4 | 0.000 | -0.237 | 0.000 | -0.316 | 0.000 | 0.210 | 0.000 | 0.292 | 0.000 | -0.214 | -0.000 | -0.206 | 0.000 | -0.169 |
| P38429 SAP30\_YEAST\* | 65 | 0.284\* | 0.051 | 0.253\* | 0.057 | 0.188 | 0.011 | -0.376\* | -0.204 | 0.315\* | -0.017 | 0.279\* | -0.037 | 0.239 | -0.047 |
| P38691 KSP1\_YEAST\*\*\* | 59 | 0.510\*\*\* | 0.460 \*\*\* | 0.715\*\*\* | 0.639\*\*\* | 0.092 | 0.082 | -0.480\*\*\* | -0.432\*\*\* | 0.652\*\*\* | 0.586\*\*\* | 0.660\*\*\* | 0.592\*\*\* | 0.663\*\*\* | 0.595\*\*\* |
| P40070 LSM4\_YEAST\*\*\* | 59 | 0.386\* | 0.335 \* | 0.427\*\* | 0.396\* | 0.045 | 0.008 | -0.531\*\*\* | -0.472\*\*\* | 0.509\*\*\* | 0.421\*\* | 0.480\*\*\* | 0.399\* | 0.452\*\*\* | 0.379\* |
| P40356 MED3\_YEAST | 27 | 0.344 | 0.329 | 0.373 | 0.362 | 0.059 | 0.037 | -0.512\* | -0.448\* | 0.466\* | 0.471\* | 0.470\* | 0.476\* | 0.450\* | 0.458\* |
| P40956 GTS1\_YEAST | 58 | 0.180 | 0.120 | 0.214 | 0.167 | -0.005 | -0.039 | -0.101 | -0.047 | 0.245 | 0.207 | 0.256 | 0.220 | 0.262\* | 0.228 |
| P53894 CBK1\_YEAST\*\* | 59 | 0.163 | 0.187 | 0.028 | 0.049 | 0.340\* | 0.361\* | -0.126 | -0.126 | 0.123 | 0.093 | 0.107 | 0.087 | 0.088 | 0.079 |
| Q05166 NUP59\_YEAST\*\*\* | 54 | 0.844\*\*\* | 0.821 \*\*\* | 0.870\*\*\* | 0.837\*\*\* | 0.200 | 0.266 | -0.563\*\*\* | -0.580\*\*\* | 0.827\*\*\* | 0.761\*\*\* | 0.843\*\*\* | 0.774\*\*\* | 0.858\*\*\* | 0.788\*\*\* |
| Q05672 RBS1\_YEAST\*\*\* | 52 | 0.710\*\*\* | 0.626 \*\*\* | 0.761\*\*\* | 0.704\*\*\* | 0.126 | 0.098 | -0.585\*\*\* | -0.543\*\*\* | 0.774\*\*\* | 0.707\*\*\* | 0.787\*\*\* | 0.721\*\*\* | 0.793\*\*\* | 0.734\*\*\* |
| Q08925 MRN1\_YEAST\*\*\* | 65 | 0.510\*\*\* | 0.393\*\* | 0.448\*\*\* | 0.302\* | 0.370\* | 0.360\* | -0.482\*\*\* | -0.439\*\*\* | 0.515\*\*\* | 0.376\* | 0.478\*\*\* | 0.337\* | 0.436\*\*\* | 0.300\*  |
| Q12139 YP022\_YEAST\*\*\* | 51 | 0.422\* | 0.433\*\* | 0.357\* | 0.370\* | 0.317\* | 0.319\* | -0.477\*\*\* | -0.431\*\* | 0.401\* | 0.398\* | 0.362\* | 0.363\* | 0.329\* | 0.332\*  |
| Q12221 PUF2\_YEAST\*\* | 9 | 0.830\* | 0.850\* | 0.716\* | 0.780\* | 0.887\*\* | 0.874\* | -0.409 | -0.568 | 0.571 | 0.698\* | 0.624 | 0.723\* | 0.711\* | 0.769\*  |
| Q12224 RLM1\_YEAST\*\*\* | 30 | 0.629\*\*\* | 0.556\*\* | 0.622\*\*\* | 0.564\*\* | 0.378\* | 0.324 | -0.371\* | -0.285 | 0.699\*\*\* | 0.600\*\*\* | 0.729\*\*\* | 0.627\*\*\* | 0.738\*\*\* | 0.638\*\*\* |
| Q12361 GPR1\_YEAST | 59 | 0.280\* | 0.285\* | 0.271\* | 0.273\* | 0.143 | 0.155 | -0.323\* | -0.312\* | 0.305\* | 0.307\* | 0.289\* | 0.291\* | 0.270\* | 0.271\* |
| Q99383 HRP1\_YEAST | 57 | 0.067 | -0.046 | 0.094 | -0.064 | -0.017 | 0.023 | -0.132 | -0.073 | 0.130 | -0.002 | 0.134 | -0.009 | 0.123 | -0.026 |

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| 1. **Correlations of other prion formers across Saccharomycetes for PLAAC PRDscore for prion-like composition**
 |
| **UniProtID +** **UniProtName** | **N** | **% polyN+****polyQ** | **% polyN** | **% polyQ** | **DNA GC%** | **% of proteome with PLAAC PRDscore >0.0** | **% of proteome with PLAAC PRDscore ≥15.0** | **% of proteome with PLAAC PRDscore ≥30.0** |
| **Weighted (W) or Unweighted (UW)** |  | **W** | **UW** | **W** | **UW** | **W** | **UW** | **W** | **UW** | W | **UW** | **W** | **UW** | **W** | **UW** |
| P12383 PDR1\_YEAST | 22 | 0.356 | -0.015 | 0.283 | -0.027 | 0.353 | 0.027 | -0.111 | 0.052 | 0.332 | -0.197 | 0.371 | -0.154 | 0.387 | -0.231 |
| P14907 NSP1\_YEAST | 57 | 0.177 | 0.150 | 0.149 | 0.124 | 0.134 | 0.116 | -0.280\* | -0.218 | 0.225 | 0.228 | 0.168 | 0.168 | 0.084 | 0.086 |
| P18494 GLN3\_YEAST\*\*\* | 58 | 0.764\*\*\* | 0.573\*\*\* | 0.866\*\*\* | 0.705\*\*\* | 0.059 | -0.021 | -0.428\*\* | -0.282\* | 0.681\*\*\* | 0.573\*\*\* | 0.745\*\*\* | 0.631\*\*\* | 0.810\*\*\* | 0.699\*\*\* |
| P32770 NRP1\_YEAST\*\*\* | 63 | 0.478\*\*\* | 0.354\* | 0.546\*\*\* | 0.391\* | 0.034 | 0.085 | -0.348\* | -0.250\* | 0.478\*\*\* | 0.314\* | 0.522\*\*\* | 0.364\* | 0.578\*\*\* | 0.390\* |
| P32831 NGR1\_YEAST | 55 | 0.098 | 0.133 | -0.060 | -0.004 | 0.296\* | 0.285\* | -0.045 | -0.099 | 0.089 | 0.141 | 0.111 | 0.154 | 0.137 | 0.151 |
| P38180 YBI1\_YEAST | 27 | 0.083 | 0.071 | 0.083 | 0.058 | 0.015 | 0.056 | -0.198 | -0.206 | 0.006 | -0.149 | 0.068 | -0.074 | 0.146 | -0.091 |
| P38216 YBM6\_YEAST | 4 | 0.000 | -0.237 | 0.000 | -0.316 | -0.000 | 0.210 | 0.000 | 0.292 | 0.000 | -0.208 | 0.000 | -0.121 | 0.000 | -0.141 |
| P38429 SAP30\_YEAST | 65 | 0.139 | -0.030 | 0.102 | -0.026 | 0.141 | -0.021 | -0.084 | -0.062 | 0.169 | -0.150 | 0.160 | -0.133 | 0.120 | -0.182 |
| P38691 KSP1\_YEAST\*\* | 59 | 0.264\* | 0.229 | 0.415\*\* | 0.339\* | -0.009 | 0.013 | -0.284\* | -0.223 | 0.264\* | 0.195 | 0.210 | 0.162 | 0.196 | 0.101 |
| P40070 LSM4\_YEAST\*\*\* | 59 | 0.514\*\*\* | 0.437\*\* | 0.518\*\*\* | 0.461\*\*\* | 0.185 | 0.133 | -0.570\*\*\* | -0.502\*\*\* | 0.607\*\*\* | 0.448\*\*\* | 0.540\*\*\* | 0.406\*\* | 0.468\*\*\* | 0.336\*  |
| P40356 MED3\_YEAST | 27 | 0.315 | 0.314 | 0.360 | 0.366 | -0.013 | -0.037 | -0.538\* | -0.492\* | 0.472\* | 0.484\* | 0.410\* | 0.431\* | 0.407\* | 0.440\* |
| P40956 GTS1\_YEAST | 58 | 0.147 | 0.121 | 0.175 | 0.147 | -0.005 | 0.004 | -0.083 | -0.075 | 0.309\* | 0.273\* | 0.260\* | 0.237 | 0.248 | 0.231 |
| P53894 CBK1\_YEAST | 59 | 0.083 | 0.085 | 0.020 | 0.031 | 0.161 | 0.148 | -0.156 | -0.145 | 0.199 | 0.148 | 0.131 | 0.105 | 0.088 | 0.056 |
| Q05166 NUP59\_YEAST\*\*\* | 54 | 0.545\*\*\* | 0.523\*\*\* | 0.539\*\*\* | 0.512\*\*\* | 0.189 | 0.220 | -0.308\* | -0.365\* | 0.550\*\*\* | 0.455\*\* | 0.544\*\*\* | 0.454\*\* | 0.541\*\*\* | 0.420\*\* |
| Q05672 RBS1\_YEAST\*\*\* | 52 | 0.505\*\*\* | 0.434\*\* | 0.530\*\*\* | 0.488\*\*\* | 0.118 | 0.065 | -0.408\*\* | -0.382\* | 0.631\*\*\* | 0.566\*\*\* | 0.603\*\*\* | 0.538\*\*\* | 0.626\*\*\* | 0.561\*\*\* |
| Q08925 MRN1\_YEAST\*\*\* | 65 | 0.443\*\*\* | 0.333\* | 0.371\* | 0.241 | 0.358\* | 0.338\* | -0.376\* | -0.354\* | 0.314\* | 0.269\* | 0.313\* | 0.257\* | 0.236 | 0.168 |
| Q12139 YP022\_YEAST | 51 | 0.146 | 0.182 | 0.097 | 0.136 | 0.168 | 0.171 | -0.110 | -0.123 | 0.196 | 0.229 | 0.159 | 0.196 | 0.097 | 0.120 |
| Q12221 PUF2\_YEAST\*\* | 9 | -0.335 | -0.564 | -0.531 | -0.666 | 0.188 | -0.216 | 0.903\*\* | 0.862\* | 0.120 | -0.402 | 0.024 | -0.411 | 0.183 | -0.387 |
| Q12224 RLM1\_YEAST\*\*\* | 30 | 0.407\* | 0.363\* | 0.119 | 0.109 | 0.627\*\*\* | 0.546\* | 0.060 | 0.072 | 0.486\* | 0.427\* | 0.541\* | 0.475\* | 0.515\* | 0.424\*  |
| Q12361 GPR1\_YEAST | 59 | -0.025 | -0.017 | -0.022 | -0.013 | -0.017 | -0.017 | -0.011 | -0.015 | -0.007 | 0.002 | -0.004 | -0.000 | -0.075 | -0.070 |
| Q99383 HRP1\_YEAST | 57 | 0.106 | -0.082 | 0.106 | -0.109 | 0.056 | 0.031 | -0.141 | -0.042 | 0.249 | 0.099 | 0.204 | 0.029 | 0.161 | -0.040 |

**†: The asterisk notations for correlations are as in Tables 1 and 2, with asterisks also used in column 1 attached to the UniProt names, to indicate the strongest level of correlation observed for each protein.**

 **N = number of sequences.**

 **'W' stands for weighted correlation and 'UW' for unweighted correlation.**

 **'% polyN' is the percentage of poly-asparagine out of all the residues in a proteome.**

 **'% polyQ' is the percentage of poly-glutamine out of all the residues in a proteome.**

 **'DNA GC%' is the percentage of guanidine+cytidine in the DNA.**

 **'% of proteome -log fLPS P-value ≥X' is the percentage of proteins in a proteome that have compositional bias for N and/or Q residues determined by -log of the P-value determined by the fLPS program being ≥X.**

 **'% of proteome PLAAC PRDscore ≥X or >X' is the percentage of proteins in a proteome that have prion-like composition determined by a PRDscore from the PLAAC program being ≥X or >X.**