

Table S1. Normalized  $^1\text{H}$ - $^{15}\text{N}$  HSQC peak intensities of  $\gamma\text{D}$ -crystallin titrated with ribosomes.

| <b>RESIDUE #</b> | <b>NO<br/>RIBOSOME</b> | <b>2 <math>\mu\text{M}</math><br/>RIBOSOME</b> | <b>4 <math>\mu\text{M}</math><br/>RIBOSOME</b> | <b>6 <math>\mu\text{M}</math><br/>RIBOSOME</b> |
|------------------|------------------------|--|--|--|
| <b>2</b>         | 1.518                  | 1.079  | 1.322  | 0.957  |
| <b>3</b>         | 0.985                  | 0.708  | 0.616  | 0.688  |
| <b>4</b>         | 1.656                  | 1.353  | 1.497  | 1.230  |
| <b>5</b>         | 1.034                  | 0.849  | 0.844  | 0.601  |
| <b>6</b>         | 0.826                  | 0.694  | 0.784  | 0.443  |
| <b>7</b>         | 0.826                  | 0.789  | 0.990  | 0.706  |
| <b>8</b>         | 1.860                  | 1.594  | 1.946  | 1.371  |
| <b>9</b>         | 0.970                  | 0.832  | 0.750  | 0.473  |
| <b>10</b>        | 0.646                  | 0.506  | 0.347  | 0.383  |
| <b>11</b>        | 1.612                  | 1.235  | 1.871  | 1.530  |
| <b>12</b>        | 0.562                  | 0.420  | 0.977  | 0.744  |
| <b>13</b>        | 1.522                  | 1.112  | 1.508  | 1.288  |
| <b>14</b>        | 0.994                  | 0.779  | 0.962  | 0.708  |
| <b>15</b>        | 0.098                  | 0.014  | -0.052   | -0.125   |
| <b>16</b>        | 1.473                  | 1.352  | 0.958  | 0.637  |
| <b>17</b>        | 0.993                  | 0.826  | 0.813  | 0.612  |
| <b>18</b>        | 1.181                  | 1.043  | 0.901  | 0.670  |
| <b>19</b>        | 0.681                  | 0.484  | 0.332  | 0.634  |
| <b>20</b>        | 1.740                  | 1.563  | 1.680  | 1.030  |
| <b>21</b>        | 1.942                  | 1.595  | 2.792  | 2.755  |
| <b>22</b>        | -0.130                 | -0.027   | 0.089  | -0.089   |
| <b>23</b>        | 0.873                  | 0.852  | 0.802  | 0.642  |
| <b>24</b>        | 0.441                  | 0.308  | 0.417  | -0.102   |
| <b>25</b>        | 1.288                  | 1.039  | 1.201  | 0.888  |
| <b>26</b>        | 0.186                  | 0.123  | 0.039  | 0.216  |
| <b>28</b>        | 0.644                  | 0.389  | 0.815  | 0.373  |
| <b>29</b>        | 1.061                  | 0.891  | 1.150  | 0.809  |
| <b>30</b>        | 1.019                  | 0.894  | 0.785  | 0.499  |
| <b>31</b>        | 2.246                  | 1.824  | 2.008  | 1.458  |
| <b>32</b>        | 1.087                  | 0.976  | 1.057  | 0.791  |
| <b>33</b>        | 1.455                  | 1.356  | 1.219  | 0.987  |
| <b>34</b>        | 0.875                  | 0.627  | 1.062  | 0.538  |
| <b>35</b>        | 0.818                  | 0.932  | 0.650  | 0.769  |
| <b>36</b>        | 1.820                  | 1.301  | 2.087  | 1.376  |
| <b>37</b>        | 1.134                  | 0.818  | 0.594  | 0.819  |
| <b>38</b>        | 0.762                  | 0.780  | 0.701  | 0.441  |
| <b>39</b>        | 1.102                  | 0.681  | 0.778  | 0.594  |
| <b>40</b>        | 0.959                  | 0.754  | 0.740  | 0.571  |

|    |        |        |       |        |
|----|--------|--------|-------|--------|
| 41 | -0.020 | -0.124 | 0.062 | 0.141  |
| 42 | 1.321  | 1.176  | 1.168 | 0.510  |
| 43 | 1.038  | 0.872  | 0.616 | 0.626  |
| 44 | 0.744  | 0.542  | 0.708 | 0.499  |
| 45 | 0.071  | -0.025 | 0.535 | 0.420  |
| 46 | 0.793  | 0.577  | 0.638 | 0.255  |
| 47 | 1.403  | 1.096  | 1.339 | 0.920  |
| 49 | 0.696  | 0.768  | 0.376 | 0.604  |
| 50 | 2.185  | 1.878  | 2.342 | 2.319  |
| 51 | 0.762  | 0.751  | 0.776 | 0.788  |
| 52 | 1.312  | 1.104  | 1.118 | 0.970  |
| 53 | 1.453  | 1.045  | 1.445 | 1.239  |
| 54 | 1.076  | 0.756  | 1.169 | 0.840  |
| 55 | 0.958  | 0.645  | 0.658 | 0.255  |
| 56 | 0.798  | 0.522  | 0.589 | 0.529  |
| 57 | 0.944  | 0.780  | 0.814 | 0.548  |
| 58 | 1.113  | 0.804  | 0.461 | 0.584  |
| 59 | 0.198  | 0.057  | 0.157 | 0.089  |
| 60 | 0.786  | 0.515  | 0.538 | 0.195  |
| 61 | 1.255  | 1.070  | 1.185 | 1.484  |
| 62 | 1.868  | 1.460  | 1.853 | 1.168  |
| 63 | 0.976  | 0.561  | 0.768 | 0.768  |
| 64 | 0.767  | 0.616  | 0.886 | 0.923  |
| 65 | 1.814  | 1.421  | 2.196 | 1.821  |
| 66 | 1.753  | 1.287  | 1.587 | 1.335  |
| 67 | 1.388  | 0.889  | 2.114 | 2.148  |
| 68 | 1.075  | 0.775  | 1.050 | 0.832  |
| 69 | 1.334  | 1.039  | 1.142 | 1.044  |
| 70 | 0.916  | 0.648  | 0.605 | 0.354  |
| 71 | 0.865  | 0.513  | 0.446 | 0.203  |
| 72 | 1.309  | 1.120  | 1.483 | 1.610  |
| 73 | 2.276  | 1.887  | 1.755 | 1.345  |
| 74 | 1.705  | 1.426  | 1.523 | 1.240  |
| 75 | 0.798  | 0.547  | 0.732 | 0.358  |
| 76 | 1.025  | 0.781  | 0.832 | 0.594  |
| 77 | 1.113  | 0.870  | 0.731 | 0.706  |
| 78 | 0.590  | 0.574  | 0.406 | 0.347  |
| 79 | 0.659  | 0.742  | 0.402 | 0.427  |
| 80 | 0.775  | 0.524  | 0.580 | 0.256  |
| 81 | 0.528  | 0.308  | 0.308 | -0.129 |
| 83 | 1.398  | 0.709  | 1.450 | 1.249  |
| 84 | 0.819  | 0.445  | 0.972 | 0.360  |
| 85 | 0.289  | 0.139  | 0.237 | -0.097 |

|            |        |        |        |       |
|------------|--------|--------|--------|-------|
| <b>86</b>  | 3.574  | 3.036  | 3.614  | 3.225 |
| <b>87</b>  | 1.425  | 1.192  | 1.703  | 1.288 |
| <b>88</b>  | 1.143  | 0.925  | 0.933  | 0.778 |
| <b>89</b>  | 1.252  | 0.994  | 1.111  | 0.573 |
| <b>90</b>  | 0.926  | 0.723  | 0.751  | 0.673 |
| <b>91</b>  | 1.891  | 1.473  | 1.286  | 0.820 |
| <b>92</b>  | 1.336  | 0.919  | 1.595  | 1.023 |
| <b>93</b>  | 0.663  | 0.477  | 0.347  | 0.492 |
| <b>94</b>  | 1.161  | 1.260  | 1.040  | 0.455 |
| <b>95</b>  | 0.127  | 0.130  | 0.383  | 0.495 |
| <b>96</b>  | 0.815  | 0.685  | 0.665  | 0.597 |
| <b>97</b>  | 0.764  | 0.688  | 0.553  | 0.166 |
| <b>98</b>  | 0.485  | 0.551  | 0.725  | 0.467 |
| <b>99</b>  | 1.817  | 1.242  | 1.375  | 1.406 |
| <b>100</b> | 0.882  | 0.816  | 0.608  | 0.190 |
| <b>101</b> | 0.718  | 0.277  | 1.054  | 1.225 |
| <b>102</b> | 0.832  | 0.731  | 1.128  | 0.842 |
| <b>103</b> | 0.318  | 0.253  | 0.438  | 0.302 |
| <b>104</b> | 0.014  | 0.092  | 0.209  | 0.197 |
| <b>105</b> | 1.071  | 0.838  | 1.107  | 0.590 |
| <b>106</b> | -0.133 | -0.137 | -0.087 | 0.338 |
| <b>107</b> | 0.806  | 0.748  | 0.825  | 0.525 |
| <b>108</b> | 0.734  | 0.576  | 0.372  | 0.156 |
| <b>109</b> | 2.097  | 1.736  | 1.507  | 1.260 |
| <b>110</b> | 0.905  | 0.912  | 1.138  | 0.975 |
| <b>111</b> | 0.756  | 0.513  | 0.862  | 0.412 |
| <b>112</b> | 1.535  | 1.476  | 1.665  | 1.097 |
| <b>113</b> | 0.324  | 0.039  | 0.042  | 0.235 |
| <b>114</b> | 1.687  | 1.230  | 1.918  | 1.122 |
| <b>115</b> | 0.422  | 0.616  | 0.612  | 0.538 |
| <b>116</b> | 0.007  | -0.170 | 0.157  | 0.299 |
| <b>117</b> | 0.667  | 0.329  | 1.856  | 0.642 |
| <b>118</b> | 0.514  | 0.594  | 0.711  | 0.509 |
| <b>119</b> | 2.365  | 1.812  | 2.589  | 1.815 |
| <b>120</b> | 0.143  | 0.317  | -0.127 | 0.102 |
| <b>121</b> | 1.011  | 0.734  | 0.912  | 0.619 |
| <b>122</b> | 1.359  | 1.154  | 1.567  | 0.717 |
| <b>123</b> | 0.936  | 0.683  | 0.728  | 0.595 |
| <b>124</b> | 1.039  | 0.929  | 0.802  | 0.371 |
| <b>125</b> | 0.994  | 0.833  | 0.779  | 0.708 |
| <b>126</b> | 0.716  | 0.575  | 0.631  | 0.424 |
| <b>127</b> | 2.208  | 1.654  | 2.308  | 1.509 |
| <b>128</b> | 1.028  | 0.755  | 0.763  | 0.246 |

|     |        |        |        |        |
|-----|--------|--------|--------|--------|
| 129 | 1.232  | 0.897  | 1.188  | 0.469  |
| 130 | 1.022  | 0.860  | 0.610  | 0.548  |
| 131 | 0.892  | 0.885  | 0.747  | 0.475  |
| 132 | 0.699  | 0.484  | 0.809  | 0.575  |
| 133 | 0.997  | 0.886  | 0.662  | 0.370  |
| 134 | 1.035  | 0.742  | 0.661  | 0.667  |
| 135 | 1.447  | 1.560  | 1.280  | 0.966  |
| 136 | 1.330  | 1.142  | 1.036  | 0.997  |
| 137 | 0.744  | 0.694  | 0.696  | 0.487  |
| 138 | 1.971  | 1.778  | 1.648  | 0.740  |
| 139 | 0.620  | 0.499  | 0.994  | 0.790  |
| 140 | 1.125  | 0.980  | 1.133  | 0.803  |
| 141 | 0.745  | 0.577  | 0.556  | 0.753  |
| 142 | 1.089  | 0.767  | 0.873  | 0.668  |
| 143 | 1.262  | 1.023  | 1.059  | 0.393  |
| 144 | 0.961  | 0.792  | 0.892  | 0.441  |
| 145 | 0.922  | 0.704  | 0.597  | 0.466  |
| 146 | 1.221  | 0.811  | 1.120  | 0.775  |
| 148 | 0.574  | 0.414  | 0.125  | -0.036 |
| 149 | 1.589  | 1.333  | 1.615  | 1.410  |
| 150 | 1.263  | 1.143  | 1.161  | 0.540  |
| 151 | 1.715  | 1.373  | 1.883  | 1.486  |
| 152 | 1.177  | 0.923  | 1.186  | 1.008  |
| 153 | -0.585 | -0.622 | -0.698 | 0.036  |
| 154 | 1.417  | 1.263  | 1.507  | 1.202  |
| 155 | 3.604  | 2.722  | 3.365  | 2.899  |
| 156 | 2.262  | 1.636  | 2.581  | 1.767  |
| 157 | 0.793  | 0.658  | 0.871  | 0.825  |
| 158 | 1.276  | 0.930  | 1.428  | 0.827  |
| 159 | 1.470  | 1.184  | 1.236  | 0.966  |
| 160 | 1.688  | 1.315  | 1.574  | 1.413  |
| 161 | 1.331  | 1.053  | 1.444  | 1.261  |
| 162 | 2.921  | 2.415  | 2.128  | 2.070  |
| 163 | 0.370  | 0.109  | 0.080  | 0.525  |
| 164 | 0.739  | 0.479  | 0.431  | 0.370  |
| 165 | 0.992  | 0.955  | 0.960  | 0.590  |
| 166 | 0.450  | 0.512  | 0.670  | 0.625  |
| 167 | 0.226  | 0.254  | 0.372  | 0.336  |
| 168 | 1.030  | 0.868  | 0.933  | 0.924  |
| 169 | 1.034  | 0.940  | 1.399  | 1.129  |
| 170 | 0.774  | 0.777  | 0.922  | 0.446  |
| 171 | -0.013 | -0.043 | -0.116 | 0.003  |
| 172 | 1.271  | 1.341  | 1.756  | 1.287  |

173

| 2.765

2.762

4.555

5.077