Supplementary table I. Elements of matrix *W1* and vector *B1* (presented in the bias row)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Bacterial strain | Neurons in the hidden layer | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Time, t | -8.060 | -3.056 | -8.083 | -240.451 | -6.441 | -2.886 | 9.583 | -151.800 | -61.978 |
| *P. stutzeri*  reference | -19.955 | 60.389 | -1.857 | -56.161 | -25.190 | -14.676 | 16.994 | 16.207 | -43.900 |
| I1 | 76.772 | -17.435 | -2.983 | 79.016 | -1.765 | -125.222 | 105.231 | -20.917 | 39.276 |
| I2 | -162.681 | -10.151 | -153.951 | -102.577 | 0.123 | -11.508 | -76.774 | 52.125 | -131.417 |
| I3 | 74.277 | -13.044 | 18.997 | 72.205 | 84.483 | 56.607 | 83.418 | 108.835 | -0.721 |
| II1 | 15.216 | -13.599 | 41.603 | 26.247 | -41.955 | 95.367 | 8.111 | 50.492 | 31.202 |
| II2 | 52.398 | -13.966 | 17.734 | 37.868 | 72.054 | 61.504 | 15.425 | 112.229 | 62.959 |
| II3 | -117.950 | -18.555 | -16.736 | -40.118 | -2.991 | -117.067 | -97.497 | -26.389 | -156.557 |
| II4 | 52.764 | -13.966 | 19.035 | 37.945 | 71.869 | 60.900 | 15.460 | 112.204 | 61.310 |
| II5 | 52.808 | -13.966 | 18.809 | 37.887 | 71.758 | 61.004 | 15.454 | 112.326 | 61.336 |
| II6 | -27.576 | -139.406 | -12.356 | -38.778 | -1.549 | -135.303 | -60.983 | -56.600 | -143.763 |
| II7 | -24.658 | -15.005 | -9.690 | -110.539 | -3.757 | -132.803 | -95.154 | -61.992 | 31.221 |
| II8 | -14.326 | -11.842 | 65.959 | -40.972 | 4.683 | 93.601 | 25.623 | 115.893 | -93.808 |
| II9 | -31.590 | -12.349 | -33.657 | -133.964 | -94.737 | -14.172 | 7.546 | -17.181 | -28.939 |
| II10 | -83.902 | 23.639 | -16.693 | -39.724 | -1.508 | -10.071 | -55.427 | -24.630 | -80.252 |
| III1 | -24.988 | 77.177 | -9.800 | 5.423 | 10.604 | 70.631 | 65.930 | -21.692 | -27.065 |
| III2 | -124.817 | -12.894 | -164.926 | -43.941 | -31.740 | -13.866 | 2.639 | -120.724 | -33.122 |
| III3 | -18.354 | -17.690 | -3.122 | 48.193 | -1.652 | -50.946 | 115.017 | -21.058 | 32.302 |
| III4 | -18.151 | -13.172 | -2.957 | -39.693 | -73.207 | -14.226 | 91.614 | -23.751 | 32.182 |
| III5 | -26.001 | 43.590 | -10.819 | 36.295 | 1.446 | 67.259 | -79.363 | -22.115 | 1.764 |
| III6 | -22.137 | -14.377 | -6.936 | 29.393 | -2.141 | -15.158 | -74.231 | -21.693 | 15.479 |
| III7 | -27.923 | -14.030 | -12.703 | -38.991 | -1.956 | -15.225 | 6.040 | -102.740 | -32.128 |
| III8 | 86.504 | -19.498 | -3.073 | -87.146 | -0.402 | -31.740 | 10.424 | 3.104 | -30.388 |
| III9 | -25.396 | -17.160 | -10.099 | -36.782 | 0.429 | -17.259 | 2.260 | -129.681 | -31.195 |
| III10 | -22.322 | 5.571 | -7.135 | -74.942 | -1.692 | -4.950 | -51.726 | 16.017 | -84.161 |
| III11 | 101.213 | -14.362 | 95.137 | -94.960 | -1.016 | 69.595 | -33.546 | -36.715 | -96.027 |
| III12 | -18.156 | -13.264 | -2.936 | -39.690 | -56.783 | -14.298 | 84.796 | -23.747 | 32.197 |
| III13 | 38.730 | 75.189 | 13.709 | 83.752 | 0.581 | 36.842 | 14.525 | 55.079 | 112.460 |
| III14 | 76.029 | 89.695 | 64.995 | -12.202 | -1.988 | -11.879 | 14.043 | 8.869 | 32.893 |
| III15 | 89.796 | 36.326 | -3.432 | -38.570 | -1.549 | -14.916 | 18.731 | -77.948 | 76.466 |
| III16 | 71.585 | -14.486 | 74.820 | 81.630 | 1.780 | -16.964 | 19.703 | -59.707 | -29.913 |
| III17 | -19.770 | 35.900 | -4.703 | 40.251 | -0.702 | -15.084 | 10.337 | -22.885 | -5.511 |
| III18 | 12.184 | 34.407 | 3.831 | -39.798 | -1.764 | -9.818 | 12.522 | -22.783 | 107.995 |
| III19 | -18.752 | -14.980 | -3.546 | 82.925 | 2.960 | -16.935 | -104.478 | -49.993 | 74.834 |
| III20 | -24.776 | -9.279 | -9.584 | -17.196 | -93.538 | -10.830 | -98.788 | -20.577 | 1.224 |
| IV1 | 64.237 | 46.458 | -2.863 | 110.351 | 1.767 | -13.184 | 9.672 | 53.704 | 79.575 |
| IV2 | 24.952 | -72.255 | 64.173 | 94.128 | 94.407 | 47.757 | 7.798 | 114.620 | 101.872 |
| IV3 | -20.172 | 61.938 | -5.037 | 81.577 | 73.188 | 47.190 | 83.176 | -21.688 | 34.167 |
| IV4 | -146.296 | -14.984 | -111.953 | -129.793 | -4.073 | -15.835 | -39.801 | -24.600 | -121.207 |
| IV5 | -30.642 | -16.746 | -83.525 | -105.427 | -36.725 | -75.450 | -90.584 | 53.528 | 0.287 |
| IV6 | 47.456 | -14.419 | 69.794 | 114.049 | 89.687 | 63.434 | 14.110 | 55.211 | 35.087 |
| IV7 | 42.868 | 33.912 | 1.774 | 78.454 | -48.024 | 28.999 | 16.475 | -20.448 | 36.312 |
| IV8 | -14.037 | -13.601 | 69.951 | 59.425 | -62.017 | -13.343 | 14.841 | -20.452 | 33.753 |
| IV9 | 65.218 | 6.964 | 0.320 | 78.267 | -85.979 | 67.999 | 17.375 | -20.441 | 63.523 |
| IV10 | 67.128 | -14.416 | 77.973 | 84.892 | 99.674 | 40.962 | 14.566 | 74.775 | 7.036 |
| Bias | 26.651 | 16.188 | 11.476 | 38.274 | 1.170 | 16.970 | -18.276 | 22.028 | 28.511 |