**Table 2S. Predicted interactions of CagY (Cag7) calculated by STRING server**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| #term ID | term description | observed gene count | background gene count | strength | FDR | matching proteins in your network (labels) |
| CL:2854 | Mixed, incl. Bacterial secretion system, and Type IV secretion system, VirB10/TrbI | 11 | 35 | 1.65 | 1.33E-15 | HP\_0017,HP\_0039,HP\_0040,HP\_0459,HP\_0524,HP\_0525,HP\_0527,HP\_0528,HP\_0530,cagT,cagE |
| CL:2856 | Bacterial secretion system, and Type IV secretion system, VirB10/TrbI | 10 | 19 | 1.87 | 1.55E-15 | HP\_0017,HP\_0039,HP\_0040,HP\_0524,HP\_0525,HP\_0527,HP\_0528,HP\_0530,cagT,cagE |
| CL:2859 | Bacterial secretion system, and Type IV secretion system, VirB10/TrbI | 7 | 10 | 2 | 8.00E-11 | HP\_0524,HP\_0525,HP\_0527,HP\_0528,HP\_0530,cagT,cagE |
| CL:2869 | Mixed, incl. Protein-exporting ATPase activity, and Type II/IV secretion system protein | 4 | 5 | 2.06 | 8.25E-06 | HP\_0524,HP\_0525,HP\_0530,cagE |
| CL:2860 | Mixed, incl. Conjugal transfer protein, and Type IV secretion system, VirB10/TrbI | 3 | 5 | 1.93 | 0.00063 | HP\_0527,HP\_0528,cagT |
| CL:2881 | Mixed, incl. Conjugal transfer protein, and Helicase HerA, central domain | 3 | 5 | 1.93 | 0.00063 | HP\_0017,HP\_0039,HP\_0040 |