**Supplementary Table 6. Odds ratios (ratio between the observed and the randomly expected frequency) of HKRR genes located in the genome next to HK2 and RR2 genes.** Only species with HKRR genes are taken into account in the percentages. Phyla without this type of protein (Aquificae, Chlamydiae , Tenericutes, Crenarchaeota, Alveolates, Euglenozoa, Microsporidians and Monocots) do not appear in the table. Amoeboflagellates do not appear because we have not found HK proteins in the surveyed species classified in this phylum. Phylum abbreviations are given in Table 1.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Phylum | % of species with 2<odds ratio<10 | % of species with 10<odds ratio<50 | % of species with 50<odds ratio<100 | % of species with odds ratio>100 |
| At | 0.00 | 0.00 | 0.72 | 9.42 |
| Ar | 0.00 | 0.00 | 0.00 | 0.00 |
| Ba | 0.00 | 8.18 | 4.40 | 8.18 |
| Cb | 0.00 | 14.29 | 7.14 | 0.00 |
| Cd | 0.00 | 0.00 | 0.00 | 0.00 |
| L | 0.00 | 0.00 | 0.00 | 0.00 |
| V | 14.29 | 14.29 | 0.00 | 0.00 |
| Cf | 0.00 | 25.00 | 5.00 | 10.00 |
| Cr | 0.00 | 100.00 | 0.00 | 0.00 |
| Cy | 1.10 | 34.07 | 8.79 | 4.40 |
| Df | 0.00 | 25.00 | 0.00 | 0.00 |
| Dt | 0.00 | 0.00 | 0.00 | 0.00 |
| Dc | 0.00 | 0.00 | 0.00 | 0.00 |
| El | 0.00 | 0.00 | 0.00 | 100.00 |
| Ac | 0.00 | 33.33 | 0.00 | 44.44 |
| Fb | 0.00 | 0.00 | 0.00 | 0.00 |
| Fi | 0.00 | 1.17 | 2.34 | 4.68 |
| Fu | 0.00 | 0.00 | 0.00 | 0.00 |
| Ge | 0.00 | 0.00 | 0.00 | 0.00 |
| Ni | 0.00 | 0.00 | 100.00 | 0.00 |
| Nt | 0.00 | 50.00 | 0.00 | 0.00 |
| Pl | 0.00 | 5.26 | 26.32 | 26.32 |
| A | 0.00 | 8.94 | 8.94 | 12.57 |
| B | 0.00 | 9.31 | 11.27 | 25.00 |
| D | 16.88 | 42.86 | 2.60 | 2.60 |
| E | 0.00 | 9.09 | 9.09 | 9.09 |
| G | 0.00 | 2.98 | 2.09 | 17.65 |
| Z | 0.00 | 0.00 | 0.00 | 0.00 |
| S | 0.00 | 1.27 | 6.36 | 31.36 |
| Sy | 0.00 | 0.00 | 0.00 | 0.00 |
| Th | 0.00 | 0.00 | 0.00 | 0.00 |
| Tt | 0.00 | 0.00 | 0.00 | 0.00 |
| Eu | 0.00 | 3.77 | 8.49 | 14.15 |
| Ta | 0.00 | 0.00 | 0.00 | 0.00 |
| As | 0.00 | 0.00 | 0.00 | 0.00 |
| Bs | 0.00 | 0.00 | 0.00 | 0.00 |
| Ed | 0.00 | 0.00 | 0.00 | 0.00 |