**S8 Table:** List of proteomes used in the main phylomes

|  |  |  |  |
| --- | --- | --- | --- |
| Species name | Source | Number of complete phylomes used | Number of Reduced phylomes used |
| *Ashbya gossypii* | Uniprot | 3 | 2 |
| *Candida albicans* | Quest for orthologs | 3 | 18 |
| *Candida castellii* | NCBI | 3 | 0 |
| *Candida glabrata* | Genolevures | 3\* | 4\* |
| *Debaryomyces hansenii* | Uniprot | 3 | 0 |
| *Dekkera bruxellensis* | JGI | 3 | 0 |
| *Kazachstania africana* | Uniprot | 3 | 0 |
| *Kazachstania naganishii* | YGOB | 3 | 0 |
| *Kluyveromyces lactis* | Uniprot | 3 | 6 |
| *Lachancea kluyveri* | Genolevures | 3 | 6 |
| *Lachancea thermotolerans* | Genolevures | 3 | 2 |
| *Lachancea waltii* | YGOB | 3 | 2 |
| *Nadsonia fulvescens* | JGI | 3 | 0 |
| *Nakaseomyces bacillisporus* | NCBI | 3 | 0 |
| *Naumovozyma castellii* | YGOB | 3 | 0 |
| *Naumovozyma dairenensis* | Uniprot | 3 | 0 |
| *Saccharomyces bayanus* | YGOB | 3 | 0 |
| *Saccharomyces cerevisiae* | Quest for orthologs | 3\* | 10\* |
| *Scheffersomyces stipitis* | Uniprot | 3 | 0 |
| *Schizosaccharomyces pombe* | Quest for orthologs | 3 | 18 |
| *Tetrapisispora blattae* | YGOB | 3 | 0 |
| *Tetrapisispora phaffii* | Uniprot | 3 | 0 |
| *Torulaspora delbrueckii* | YGOB | 3 | 9 |
| *Vanderwaltozyma polyspora* | YGOB | 3\* | 4\* |
| *Wickerhamomyces anomalus* | JGI | 3 | 0 |
| *Yarrowia lipolytica* | Genolevures | 3 | 18 |
| *Zygosaccharomyces rouxii* | Genolevures | 3 | 9 |