**Table S11 The *P* values between TNP and other five expression profile-based methods for Fmax and AUPR on 2433 proteins of 7 species from CAFA3 test dataset**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Measure** | **GO aspect** | **(TNP, MR)** | **(TNP, PCC)** | **(TNP, MLC)** | **(TNP, SRC)** | **(TNP, ED)** |
| Fmax | MF | 8.07×10-09 | 4.92×10-09 | 2.25×10-15 | 7.16×10-09 | 1.29×10-09 |
| BP | 2.87×10-07 | 3.95×10-09 | 5.38×10-14 | 2.07×10-08 | 8.28×10-09 |
| CC | 2.14×10-07 | 8.38×10-09 | 3.53×10-12 | 1.45×10-07 | 3.72×10-09 |
| AUPR | MF | 1.41×10-01 | 3.10×10-05 | 2.41×10-11 | 3.13×10-04 | 1.15×10-05 |
| BP | 2.49×10-05 | 4.09×10-07 | 2.76×10-13 | 6.15×10-06 | 1.15×10-06 |
| CC | 8.01×10-01 | 3.59×10-08 | 7.11×10-05 | 4.46×10-02 | 1.04×10-08 |