**Supplementary Information**

**Table S1. Summary Table of the Reported Fungal Immunomodulatory Proteins (FIPs)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| species | FIPs | AA length | accession No. | ref. |
| *Antrodia camphorata* | ACA | 137 | AY56969.1 | (1) |
| *Auricularia polytricha* | APP | - | - | (2) |
| *Botryobasidium botryosum* | FIP-bbo | 112 | KDQ10166.1 | (3) |
| *Chroogomphus rutilus* | FIP-cru | 113 | KT210088.1 | (4) |
| *Dichomitus squalens* | FIP-dsq2 | 111 | XP 007363541.1 | (5) |
| *Flammulina velutipes* | FIP-fve | 114 | GU388420.1 | (6) |
| *Ganoderma applanatum* | FIP-gap1 | 113 | JN167598.1 | (7) |
| *Ganoderma applanatum* | FIP-gap2 | 113 | ART88472.1 | (8) |
| *Ganoderma australe* | c13717 | 137 |  | (9) |
| *Ganoderma atrum* | FIP-gat | 111 | - | (10) |
| *Ganoderma japonicum* | FIP-gja | 111 | AAX98241 |  |
| *Ganoderma lucidum* | FIP-glu (LZ-8) | 112 | M58032.1 | (11) |
| *Ganoderma lucidum* | FIP-glu2 (LZ-9) | 111 |  | (12) |
| *Ganoderma microsporum* | FIP-GMI | 111 | - | (13) |
| *Ganoderma sinense* | FIP-gsi | 111 | AY449805.1 | (14) |
| *Ganoderma tsugae* | FIP-gts | 110 |  | (15) |
| *Hericium erinaceus* | FIP-her |  | - | (16) |
| *Lignosus rhinocerotis* | FIP-lrh | 112 | - | (17) |
| *Nectria haematococca* | FIP-nha | 113 | GG698920.1 | (18) |
| *Poria cocos* | PCP | - | JN571084.1 | (19) |
| *Postia placenta* | FIP-ppl | 125 | KJ818121.1 | (20) |
| *Stachybotrys chartarum* | FIP-sch3 | 112 | KFA81641.1 | (21) |
| *Stachybotrys chlorohalonata* | FIP-sch2 | 112 | AQQ80204.1 | (22) |
| *Trametes versicolor* | FIP-tvc | 111 | - | (23) |
| *Trametes versicolor* | YZP | 119 | KC297708.1 | (24) |
| *Volvariella volvacea* | FIP-vvo | 113 | - | (25) |
| *V. volvacea* | FIP-vvo82 | 113 |  | (26) |

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