**S1 Table. Functional similarities of candidate reference and virulence genes revealed by BLASTn and BLASTp searches against the *Neonectria ditissima* R09/05 genome database in the** [**MycoCosm**](https://mycocosm.jgi.doe.gov/pages/blast-query.jsf?db=Neodi1) **website**.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | | ID | e value | Gene function | Link |
| *actin* | gene | Neodi1|7315 | 0.00E+00 | actin and related proteins | [[1]](https://mycocosm.jgi.doe.gov/cgi-bin/dispGeneModel?db=Neodi1&tid=7315) |
| protein | Neodi1|7315 | 0.00E+00 | actin and related proteins | [[2]](https://mycocosm.jgi.doe.gov/pages/blast-results.jsf;ofMWZi?groupId=1486127&db=Neodi1) |
| *mips* | gene | Neodi1|4374 | 0.00E+00 | myo-inositol-1-phosphate-synthase | [[3]](https://mycocosm.jgi.doe.gov/cgi-bin/dispGeneModel?db=Neodi1&tid=4374) |
| protein | Neodi1|4374 | 0.00E+00 | myo-inositol-1-phosphate synthase | [[4]](https://mycocosm.jgi.doe.gov/cgi-bin/dispGeneModel?db=Neodi1&id=4374) |
| *S8* | gene | Neodi1|6284 | 0.00E+00 | Ribosomal protein S8e | [[5]](https://mycocosm.jgi.doe.gov/cgi-bin/dispGeneModel?db=Neodi1&tid=6284) |
| protein | Neodi1|6284 | 4.85E-129 | Ribosomal protein S8e | [[6]](https://mycocosm.jgi.doe.gov/cgi-bin/dispGeneModel?db=Neodi1&id=6284) |
| *18sAMT* | gene | Neodi1|2517 | 0.00E+00 | Ribosomal RNA adenine methylase transferase | [[7]](https://mycocosm.jgi.doe.gov/cgi-bin/dispGeneModel?db=Neodi1&tid=2517) |
| protein | Neodi1|2517 | 0.00E+00 | Ribosomal RNA adenine methylase transferase | [[8]](https://mycocosm.jgi.doe.gov/cgi-bin/dispGeneModel?db=Neodi1&id=2517) |
| *btub* | gene | Neodi1|9151 | 0.00E+00 | Beta tubulin | [[9]](https://mycocosm.jgi.doe.gov/cgi-bin/dispGeneModel?db=Neodi1&tid=9151) |
| protein | Neodi1|9151 | 0.00E+00 | Beta tubulin | [[10]](https://mycocosm.jgi.doe.gov/cgi-bin/dispGeneModel?db=Neodi1&id=9151) |
| *EfTu* | gene | Neodi1|4147 | 0.00E+00 | Translation elongation factor Tu | [[11]](https://mycocosm.jgi.doe.gov/cgi-bin/dispGeneModel?db=Neodi1&tid=4147) |
| protein | Neodi1|4147 | 0.00E+00 | Translation elongation factor Tu | [[12]](https://mycocosm.jgi.doe.gov/cgi-bin/dispGeneModel?db=Neodi1&id=4147) |
| *E2* | gene | Neodi1|590 | 0.00E+00 | Ubiquitin-conjugating enzyme | [[13]](https://mycocosm.jgi.doe.gov/cgi-bin/dispGeneModel?db=Neodi1&tid=590) |
| protein | Neodi1|590 | 0.00E+00 | Ubiquitin-conjugating enzyme | [[14]](https://mycocosm.jgi.doe.gov/cgi-bin/dispGeneModel?db=Neodi1&id=590) |
| *S27a* | gene | Neodi1|9075 | 0.00E+00 | Ribosomal protein S27a | [[15]](https://mycocosm.jgi.doe.gov/cgi-bin/dispGeneModel?db=Neodi1&tid=9075) |
| protein | Neodi1|9075 | 1.78E-81 | Ribosomal protein S27a | [[16]](https://mycocosm.jgi.doe.gov/pages/blast-results.jsf;g2MXgR?groupId=1486165&db=Neodi1) |
| *g4542* | gene | Neodi1|8795 | 0.00E+00 | hypothetical protein | [[17]](https://mycocosm.jgi.doe.gov/cgi-bin/dispGeneModel?db=Neodi1&tid=8795) |
| protein | Neodi1|8795 | 4.04E-112 | hypothetical protein | [[18]](https://mycocosm.jgi.doe.gov/cgi-bin/dispGeneModel?db=Neodi1&id=8795) |
| *g5809* | gene | Neodi1|11801 | 0.00E+00 | hypothetical protein | [[19]](https://mycocosm.jgi.doe.gov/cgi-bin/dispGeneModel?db=Neodi1&tid=11801) |
| protein | Neodi1|11801 | 3.42E-123 | hypothetical protein | [[20]](https://mycocosm.jgi.doe.gov/cgi-bin/dispGeneModel?db=Neodi1&id=11801) |
| *g7123* | gene | Neodi1|9845 | 0.00E+00 | hypothetical protein | [[21]](https://mycocosm.jgi.doe.gov/cgi-bin/dispGeneModel?db=Neodi1&tid=9845) |
| protein | Neodi1|9845 | 4.38E-99 | hypothetical protein | [[22]](https://mycocosm.jgi.doe.gov/cgi-bin/dispGeneModel?db=Neodi1&id=9845) |

1 Threshold for similarity: e-10