

| Protein                            | Function                                                       | <i>A. niger</i> protein identifier |                        | Expression<br>(avNtCov ± sd) | 3log2FC (read count) vs NW305 -Fe |                        |
|------------------------------------|----------------------------------------------------------------|------------------------------------|------------------------|------------------------------|-----------------------------------|------------------------|
|                                    |                                                                | <sup>1</sup> CBS 513.88            | <sup>2</sup> ATCC 1015 | NW305 -Fe                    | NW305 ++Fe                        | NW186 -Fe              |
| Iron siderophore biosynthesis (SB) |                                                                |                                    |                        |                              |                                   |                        |
| SidA/Sid1                          | Ornithine monooxygenase                                        | An05g00220                         | 1118819                | (429.39 ± 36.37)             | -6.60 (4.83 ± 0.51)               | -0.40 (292.64 ± 16.28) |
| SidC/Sid2                          | Ferricrocin/ferrichrome NRPS                                   | An06g01300                         | 1189171                | (16.25 ± 3.83)               | -1.91 (5.48 ± 0.42)               | 0.13 (15.81 ± 1.48)    |
| SidD                               | Fusarinine C/coprogen NRPS                                     | An03g03520                         | 1186498                | (42.80 ± 11.49)              | -4.09 (2.72 ± 0.66)               | -0.41 (28.68 ± 1.35)   |
| SidF                               | Transacylase                                                   | An03g03540                         | 1109689                | (128.15 ± 8.48)              | -7.90 (0.54 ± 0.09)               | -0.18 (101.98 ± 19.15) |
| SidG                               | Transacetylase                                                 | -                                  | -                      | -                            | -                                 | -                      |
| SidH                               | Mevalonyl-CoA hydratase                                        | An03g03550                         | 1186501                | (102.36 ± 6.69)              | -8.26 (0.30 ± 0.05)               | 0.06 (95.71 ± 3.03)    |
| SidI                               | Mevalonyl-CoA ligase                                           | An06g01320                         | 1160936                | (129.09 ± 16.06)             | -7.85 (0.50 ± 0.14)               | -0.21 (100.37 ± 13.34) |
| SidL                               | Transacetylase                                                 | An01g03300                         | 1116897                | (42.57 ± 7.25)               | -0.01 (45.59 ± 3.12)              | 0.69 (61.85 ± 3.37)    |
| NpgA/PptA                          | Phosphopantetheinyl transferase                                | An12g03950                         | 1143106                | (14.81 ± 0.43)               | -0.06 (15.65 ± 2.45)              | 0.11 (14.36 ± 0.98)    |
| EstB                               | Triacetyl-fusarinine C (TAFC) esterase                         | -                                  | -                      | -                            | -                                 | -                      |
| Lipase/Esterase                    | Putative SB lipase/esterase                                    | An03g03530                         | 1092812                | (306.12 ± 4.01)              | -6.85 (2.82 ± 0.11)               | 0.22 (318.38 ± 19.30)  |
| Iron siderophore transport         |                                                                |                                    |                        |                              |                                   |                        |
| MirA                               | Enterobactin transporter                                       | -                                  | -                      | -                            | -                                 | -                      |
| MirB                               | Triacetyl-fusarinine C/coprogen B transporter                  | An03g03560                         | 1146101                | (343.26 ± 69.92)             | -9.01 (0.71 ± 0.05)               | -0.25 (259.78 ± 1.77)  |
| MirC                               | Putative iron siderophore transporter                          | An02g14190                         | 1165578                | (110.33 ± 11.86)             | -1.20 (53.59 ± 0.79)              | 0.19 (112.62 ± 0.55)   |
| MirD                               | Putative iron siderophore transporter                          | An07g06240                         | 1105147                | (202.52 ± 38.35)             | -6.32 (2.88 ± 0.05)               | 1.15 (407.77 ± 8.54)   |
| SitT                               | ABC transporter                                                | An03g03620                         | 1109705                | (93.13 ± 18.69)              | -6.38 (1.20 ± 0.18)               | -0.35 (65.19 ± 4.18)   |
| Reductive iron assimilation (RIA)  |                                                                |                                    |                        |                              |                                   |                        |
| FtrA                               | Iron permease                                                  | An16g01130                         | 1217505                | (0.53 ± 0.01)                | -                                 | -                      |
|                                    |                                                                | An01g08950                         | 1142522                | (253.60 ± 13.40)             | -5.68 (5.10 ± 0.01)               | -0.30 (184.01 ± 18.45) |
|                                    |                                                                | An15g05510                         | 1134159                | (2.91 ± 0.02)                | -2.38 (0.59 ± 0.11)               | 2.10 (11.38 ± 1.57)    |
| FreB                               | Ferric reductase                                               | An11g00220                         | 1126967                | (23.56 ± 1.47)               | -2.13 (5.98 ± 0.09)               | 0.18 (23.87 ± 0.67)    |
|                                    |                                                                | An16g01150                         | 1091043                | (0.13 ± 0.03)                | -                                 | -                      |
|                                    |                                                                | An13g02180                         | 1081543                | (0.02 ± 0.01)                | -                                 | -                      |
|                                    |                                                                | An10g00310                         | 1123184                | (12.71 ± 1.64)               | 0.83 (24.53 ± 1.39)               | -0.96 (5.76 ± 0.32)    |
|                                    | Putative low affinity iron permease                            |                                    | 1145780                | (55.04 ± 5.10)               | -0.61 (39.93 ± 8.16)              | -1.69 (15.35 ± 0.44)   |
|                                    | Putative metallo-reductase/ferric-(chelate) reductase activity |                                    | 1115362                | (3.65 ± 0.05)                | 6.82 (466.27 ± 18.76)             | 4.41 (69.97 ± 24.19)   |
|                                    |                                                                | 1156801                            | (14.37 ± 1.96)         | 0.23 (18.53 ± 1.20)          | -0.35 (10.11 ± 0.37)              |                        |

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|------------------------------------------------|------------------------------------------------------------------------------------------------------|------------------------------------|------------------------|------------------------------|-----------------------------------|-------------------------|
|                                                |                                                                                                      | <sup>1</sup> CBS 513.88            | <sup>2</sup> ATCC 1015 | NW305 -Fe                    | NW305 ++Fe                        | NW186 -Fe               |
|                                                | Putative metalloredutase/ferric-(chelat) reductase activity - cont.                                  | 1119237                            |                        | (18.67 ± 1.46)               | 3.74 (279.22 ± 11.48)             | 2.46 (91.05 ± 15.23)    |
|                                                |                                                                                                      | 1157566                            |                        | (1.33 ± 0.12)                | -4.49 (0.06 ± 0.03)               | 1.09 (2.65 ± 0.15)      |
|                                                |                                                                                                      | 1164388                            |                        | (1.63 ± 0.24)                | 5.12 (55.86 ± 3.18)               | 3.87 (19.05 ± 1.79)     |
|                                                |                                                                                                      | 1185315                            |                        | (38.27 ± 0.78)               | 2.11 (183.00 ± 13.76)             | 1.63 (106.32 ± 3.12)    |
|                                                |                                                                                                      | 1158250                            |                        | (2.94 ± 0.10)                | 1.20 (7.39 ± 0.06)                | -0.47 (1.86 ± 0.22)     |
|                                                |                                                                                                      | 1123184                            |                        | (12.71 ± 1.64)               | 0.83 (24.53 ± 1.39)               | -0.96 (5.76 ± 0.32)     |
|                                                |                                                                                                      | 1220516                            |                        | (7.00 ± 0.10)                | 0.48 (10.63 ± 0.13)               | -0.56 (4.28 ± 0.73)     |
| NADPH oxidase                                  |                                                                                                      | 1155382                            | (11.88 ± 0.76)         | 0.64 (20.46 ± 2.22)          | 0.48 (14.75 ± 2.99)               |                         |
| FetC                                           | Ferroxidase                                                                                          | An01g08960                         | 1142524                | (217.48 ± 18.30)             | -8.43 (0.64 ± 0.11)               | -0.18 (172.51 ± 8.58)   |
|                                                |                                                                                                      | An15g05520                         | 1134160                | (0.21 ± 0.04)                | -                                 | 2.32 (1.04 ± 0.02)      |
|                                                |                                                                                                      | An14g05370                         | 1156112                | (1.86 ± 0.20)                | 0.50 (2.74 ± 0.25)                | -0.67 (0.97 ± 0.18)     |
| Regulatory proteins/transcription factors (TF) |                                                                                                      |                                    |                        |                              |                                   |                         |
| AcuM                                           | Zn <sub>2</sub> Cys <sub>6</sub> TF; Repression of iron uptake including SB and RIA                  | An02g04370                         | 1184770                | (20.75 ± 2.02)               | -0.37 (17.47 ± 0.73)              | -0.14 (17.09 ± 2.53)    |
| HapX                                           | bZip TF; Repression of iron consumption, activation of iron uptake                                   | An09g06280                         | 1001547                | (133.73 ± 17.79)             | -1.74 (44.57 ± 3.11)              | -0.74 (72.35 ± 2.62)    |
| MpkA                                           | MAP kinase A; Repression of SB                                                                       | An01g09520                         | 205706                 | (86.97 ± 5.29)               | -0.43 (70.76 ± 5.92)              | -0.33 (61.45 ± 3.71)    |
| PacC                                           | (Cys <sub>2</sub> His <sub>2</sub> ) <sub>3</sub> TF; Activation of TAFC biosynthesis in alkaline pH | An02g07890                         | 1184997                | (24.63 ± 0.48)               | 0.72 (45.21 ± 1.71)               | 1.53 (64.19 ± 1.30)     |
| SrbA                                           | bHLH-LZ TF; Activation of iron uptake including SB and RIA                                           | An03g05170                         | 1177110                | (32.03 ± 6.94)               | -0.58 (23.42 ± 2.02)              | 0.80 (49.60 ± 6.36)     |
|                                                | bHLH DNA binding domain                                                                              |                                    | 1181156                | (1970.48 ± 217.65)           | -1.15 (986.22 ± 199.26)           | 1.32 (4409.21 ± 597.09) |
| SreA                                           | GATA TF; Repression of iron uptake including SB and RIA                                              | An01g02370                         | 1181829                | (33.65 ± 1.19)               | 0.82 (66.02 ± 3.24)               | 1.25 (71.48 ± 2.19)     |

<sup>1</sup>As identified by Franken *et al.* (see reference in main text).

<sup>2</sup>Best bi-directional Blast hit CBS 513.88 (see above) with ATCC 1015, unless no CBS 513.88 homologue was identified.

<sup>3</sup>read counts for FC calculation, expression (avNtCov ± sd) given in brackets