

# Supplemental File S1: Vitek 2 profiles of ST75-MRSA-IV and ST883-MRSA-IV

For comparison, data of ATCC29213 (the quality control strain as recommended by the manufacturer) are also displayed.

| Substrate                            |       | <i>S. aureus</i><br>ATCC29213 | ST75-MRSA-IV<br>(5 isolates) | ST883-MRSA-IV<br>(1 isolate) |
|--------------------------------------|-------|-------------------------------|------------------------------|------------------------------|
| Arginine dihydrolase                 | ADH1  | POSITIVE                      | POSITIVE                     | POSITIVE                     |
| Arginine dihydrolase                 | ADH2S | VARIABLE                      | NEGATIVE                     | POSITIVE                     |
| Alpha -galactosidase                 | AGAL  | NEGATIVE                      | NEGATIVE                     | NEGATIVE                     |
| Alpha-glucosidase                    | AGLU  | VARIABLE                      | VARIABLE (3 out of 5 pos.)   | NEGATIVE                     |
| Alanine arylamidase                  | ALAA  | NEGATIVE                      | NEGATIVE                     | NEGATIVE                     |
| Alpha-mannosidase                    | AMAN  | NEGATIVE                      | NEGATIVE                     | NEGATIVE                     |
| Amygdalin                            | AMY   | NEGATIVE                      | NEGATIVE                     | NEGATIVE                     |
| Ala-phe-pro arylamidase              | APPA  | NEGATIVE                      | NEGATIVE                     | NEGATIVE                     |
| L-aspartic acid arylamidase          | ASPA  | NEGATIVE                      | NEGATIVE                     | NEGATIVE                     |
| Bacitracin resistance                | BACI  | POSITIVE                      | VARIABLE (4 out of 5 pos.)   | POSITIVE                     |
| Beta-galactosidase                   | BGAL  | VARIABLE                      | NEGATIVE                     | NEGATIVE                     |
| Beta-Glucorinidase                   | BGUR  | NEGATIVE                      | NEGATIVE                     | NEGATIVE                     |
| Beta-Glucorinidase                   | BGURR | NEGATIVE                      | NEGATIVE                     | NEGATIVE                     |
| alpha-cyclodextrin                   | CDEX  | NEGATIVE                      | NEGATIVE                     | NEGATIVE                     |
| Galactose                            | DGAL  | VARIABLE                      | VARIABLE (2 out of 5 pos.)   | POSITIVE                     |
| Maltose                              | DMAL  | POSITIVE                      | POSITIVE                     | POSITIVE                     |
| Mannitol                             | DMAN  | POSITIVE                      | POSITIVE                     | POSITIVE                     |
| Mannose                              | DMNE  | POSITIVE                      | POSITIVE                     | POSITIVE                     |
| Raffinose                            | DRAF  | NEGATIVE                      | NEGATIVE                     | NEGATIVE                     |
| Ribose                               | DRIB  | VARIABLE                      | VARIABLE (1 out of 5 pos.)   | NEGATIVE                     |
| Sorbitol                             | DSOR  | NEGATIVE                      | NEGATIVE                     | NEGATIVE                     |
| Trehalose                            | DTRE  | NEGATIVE                      | POSITIVE                     | POSITIVE                     |
| Xylose                               | DXYL  | NEGATIVE                      | NEGATIVE                     | NEGATIVE                     |
| Lactose                              | LAC   | VARIABLE                      | NEGATIVE                     | NEGATIVE                     |
| L-leucine arylamidase                | LEUA  | VARIABLE                      | NEGATIVE                     | NEGATIVE                     |
| Lactate                              | LLATK | POSITIVE                      | VARIABLE (4 out of 5 pos.)   | POSITIVE                     |
| Methyl-beta-D-glucopyranoside        | MBDG  | POSITIVE                      | POSITIVE                     | POSITIVE                     |
| N-acetyl-glucosamine                 | NAG   | VARIABLE                      | VARIABLE (3 out of 5 pos.)   | NEGATIVE                     |
| Growth in 6.5 NaCl                   | NC6.5 | POSITIVE                      | POSITIVE                     | POSITIVE                     |
| Novobiocin resistance                | NOVO  | VARIABLE                      | NEGATIVE                     | NEGATIVE                     |
| O/129 resistance                     | O129R | POSITIVE                      | VARIABLE (4 out of 5 pos.)   | POSITIVE                     |
| Optochin resistance                  | OPTO  | POSITIVE                      | POSITIVE                     | POSITIVE                     |
| Alkaline phosphatase                 | PHOS  | POSITIVE                      | POSITIVE                     | POSITIVE                     |
| Phosphatidylinositol-Phospholipase C | PIPLC | NEGATIVE                      | NEGATIVE                     | NEGATIVE                     |
| Polymyxin B resistance               | POLYB | VARIABLE                      | VARIABLE (4 out of 5 pos.)   | POSITIVE                     |
| Pro arylamidase beta-glucuronidase   | PROA  | NEGATIVE                      | NEGATIVE                     | NEGATIVE                     |
| Pullulan                             | PUL   | NEGATIVE                      | NEGATIVE                     | NEGATIVE                     |
| L-pyroglutamic acid arylamidase      | PYRA  | POSITIVE                      | POSITIVE                     | NEGATIVE                     |
| Sucrose                              | SAC   | POSITIVE                      | POSITIVE                     | POSITIVE                     |
| Salicin                              | SAL   | NEGATIVE                      | NEGATIVE                     | NEGATIVE                     |
| Tyrosine arylamidase                 | TYRA  | NEGATIVE                      | NEGATIVE                     | NEGATIVE                     |
| Urease                               | URE   | NEGATIVE                      | NEGATIVE                     | POSITIVE                     |