**Supplementary file 3. SSAPs present in *S. aureus* phages.**

|  |  |  |
| --- | --- | --- |
| **SSAP family** | **Bacteriophage** | **Accession number** |
| Sak | 80α | YP\_001285330 |
|  | φX2 | YP\_240871 |
|  | φ53 | YP\_239694 |
|  | φ85 | YP\_239777 |
|  | φ88 | YP\_240716 |
|  | φMR25 | YP\_001949813 |
|  | φP954 | YP\_003169647 |
| Sak4 | φ52A | YP\_240651 |
|  | φ11 | NP\_803265 |
|  | φ80 | YP\_009268656 |
|  | φ96 | YP\_240275 |
|  | φETA | NP\_510911 |
| Erf | φSLT | NP\_075480 |
|  | φED133 | ADI98419 |
|  | φETA3 | YP\_001004345 |
|  | φStB12 | YP\_009130692 |
|  | φ5967PVL | YP\_007237141 |
|  | φSA97 | YP\_009218463 |
|  | φ7247PVL | BAL03577 |
| Redβ | φN315  phiBU01 | NP\_835535  YP\_009113134 |