**Table S1.** Features of the open reading frames (ORFs) of bacteriophage phiC120 and homology to proteins databases.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ORF | Start | Stop | Strand | Size aa\* | Homology | Accession no. | Best match E- value/% identity | Domain |
| 1 | 23 | 127 | - | 34 | DNA end protector protein [*Escherichia* phage mobillu] | QHR72657.1 | 6.00E-13/100 | None |
| 2 | 130 | 579 | - | 149 | head completion protein [*Escherichia* phage vB\_EcoM\_PhAPEC2] | YP\_009056738.1 | 6.00E-106/100 | Tn7\_Tnp\_TnsA\_N |
| 3 | 641 | 1216 | + | 191 | baseplate wedge subunit [*Escherichia* phage RB69] | NP\_861853.1 | 4.00E-138/100 | Phage\_gp53 superfamily |
| 4 | 1216 | 2949 | + | 577 | baseplate hub subunit and tail lysozyme [*Escherichia* phage p000v] |  | 0.0/99.65 | Gp5\_OB, Lyz\_like superfamily (Lyzozyme), Gp5\_C |
| 5 | 2995 | 3468 | + | 157 | hypothetical protein [*Escherichia* phage phiE142] | ALY07982.1 | 6.00E-112/100 | None |
| 6 | 3471 | 3764 | + | 97 | baseplate hub needle [*Shigella* phage Shf125875] | YP\_009100699.1 | 2.00E-64/100 | PAAR motif |
| 7 | 3773 | 5743 | + | 656 | baseplate wedge subunit [*Escherichia* phage phiE142] | ALY07984.1 | 0.0/100 | None |
| 8 | 5740 | 8838 | + | 1032 | baseplate wedge initiator [*Salmonella enterica* subsp. enterica] | EAA6275622.1 | 0.0/99.71 | None |
| 9 | 8831 | 9835 | + | 334 | baseplate wedge subunit [*Escherichia* phage RB69] | NP\_861859.1 | 0.0/100 | Phage\_Gp8 superfamily |
| 10 | 9898 | 10761 | + | 287 | baseplate wedge tail fiber connector [*Shigella* phage Shf125875] | YP\_009100703.1 | 0.0/99.65 | T4\_gp9\_10 |
| 11 | 10761 | 12575 | + | 604 | baseplate wedge subunit and tail pin [*Escherichia* phage PHB12] | QBP05779.1 | 0.0/99.50 | T4\_gp9\_10 |
| 12 | 12575 | 13234 | + | 219 | baseplate wedge subunit [*Escherichia* phage phiE142] | ALY07989.1 | 3.00E-158/100 | GP11 superfamily |
| 13 | 13231 | 14781 | + | 516 | short tail fibers [*Escherichia* phage phiE142] | ALY07990.1 | 0.0/100 | gp12-short\_mid, Collar, S\_tail\_recep\_bd |
| 14 | 14791 | 16233 | + | 480 | fibritin collar whiskers protein [*Escherichia* phage phiE142] | ALY07991.1 | 0.0/100 | Fibritin\_C |
| 15 | 16266 | 17192 | + | 308 | neck protein [*Escherichia* phage vB\_EcoM\_JS09] | YP\_009037597.1 | 0.0/100 | None |
| 16 | 17194 | 17958 | + | 254 | neck protein [*Escherichia* phage RB69] | NP\_861866.1 | 0.0/100 | T4\_neck-protein superfamily |
| 17 | 18011 | 18832 | + | 273 | tail sheath stabilizer and completion protein [*Escherichia* phage vB\_EcoM\_PhAPEC2] | YP\_009056751.1 | 0.0/99.63 | T4-gp15\_tss |
| 18 | 18842 | 19336 | + | 164 | small terminase protein [*Escherichia* phage vB\_EcoM\_JS09] | YP\_009030627.1 | 9.00E-117/99.39 | DNA\_packaging superfamily |
| 19 | 19320 | 21155 | + | 611 | large terminase protein [*Escherichia* phage RB69] | NP\_861869.1 | 0.0/99.84 | Terminase\_6, Terminase6C |
| 20 | 21186 | 23168 | + | 660 | tail sheath protein [*Escherichia* phage RB69] | NP\_861870.1 | 0.0/99.39 | Phage-sheath\_1N, Phage-sheath\_1, Phage-sheath\_1C |
| 21 | 23281 | 23772 | + | 163 | tail tube protein [*Escherichia* phage vB\_EcoM\_JS09] | YP\_009030624.1 | 2.00E-116/100 | Phage\_T4\_gp19 |
| 22 | 23857 | 25428 | + | 523 | portal vertex protein [*Escherichia* phage vB\_EcoM\_JS09] | YP\_009030623.1 | 0.0/100 | Peptidase\_S80 |
| 23 | 25428 | 25664 | + | 78 | prohead core protein [*Escherichia* phage RB69] | NP\_861873.1 | 9.00E-144/100 | Gp67 super |
| 24 | 25664 | 26089 | + | 141 | prohead core protein [*Escherichia* phage RB69] | NP\_861874.1 | 1.00E-95/99.29 | None |
| 25 | 26089 | 26730 | + | 213 | prohead core scaffolding protein and protease [*Escherichia* phage RB69] | NP\_861875.1 | 8.00E-153/100 | Peptidase-S77 |
| 26 | 26764 | 27576 | + | 270 | prohead core protein [*Escherichia* phage vB\_EcoM\_JS09] | YP\_009037595.1 | 0.0/100 | None |
| 27 | 27594 | 29162 | + | 522 | major capsid protein [*Escherichia* phage vB\_EcoM\_JS09] | YP\_009037594.1 | 0.0/99.81 | Gp23 superfamily |
| 28 | 29215 | 29484 | - | 89 | hypothetical protein [*Escherichia* phage vB\_EcoM\_PhAPEC2] | YP\_009056762.1 | 2.00E-57/98.88 | None |
| 29 | 29585 | 30865 | + | 426 | capsid vertex protein [*Escherichia* phage FP43] | QGT55403.1 | 0.0/99.30 | Gp23 superfamily |
| 30 | 30896 | 31903 | - | 335 | RNA ligase [*Shigella* phage SHSML-52-1] | YP\_009289105.1 | 0.0/98.81 | RNA\_ligase, T4\_Rn12\_C |
| 31 | 32023 | 32274 | - | 83 | hypothetical protein [*Escherichia* phage vB\_EcoM\_JS09] | YP\_009037589.1 | 1.00E-55/100 | None |
| 32 | 32271 | 32465 | - | 64 | hypothetical protein [*Escherichia* phage RB69] | NP\_861883.1 | 6.00E-37/100 | DUF2774 |
| 33 | 32567 | 33982 | - | 471 | Head outer capsid protein [*Escherichia* phage RB69] | NP\_861884.13 | 0.0/98.73 | PKD |
| 34 | 33992 | 34660 | - | 222 | inhibitor of prohead protease [*Shigella* phage JK45] | QEG06579.1 | 5.00E-158/99.10 | None |
| 35 | 34711 | 36225 | + | 504 | UvsW helicase [*Escherichia* phage RB69] | NP\_861886.1 | 0.0/99.60 | ResIII, Helicase\_C |
| 36 | 36251 | 36481 | + | 76 | hypothetical protein [*Escherichia* phage RB69] | NP\_861887.1 | 2.00E-44/98.68 | UvsW |
| 37 | 36541 | 36708 | - | 55 | hypothetical protein [*Escherichia* phage RB69] | YP\_009037583.1 | 1.00E-31/98.18 | DUF2685 superfamily |
| 38 | 36741 | 36965 | - | 74 | hypothetical protein [*Escherichia* phage vB\_EcoM\_PhAPEC2] | YP\_009056771.1 | 1.00E-46/100 | None |
| 39 | 36965 | 37459 | - | 164 | repair and ssDNA binding protein [*Escherichia* phage RB69] | NP\_861890.1 | 1.00E-116/100 | UvsY |
| 40 | 37459 | 37857 | - | 132 | baseplate wedge subunit [*Escherichia* phage RB69] | NP\_861891.1 | 1.00E-90/100 | GPW\_gp25 |
| 41 | 37857 | 38483 | - | 208 | baseplate hub subunit [*Escherichia* phage RB69] | NP\_861892.1 | 8.00E-154/100 | T4\_baseplate |
| 42 | 38531 | 39283 | + | 250 | baseplate hub assembly protein [*Escherichia* phage vB\_EcoM\_JS09] | YP\_009037578.1 | 0.0/99.60 | T4\_baseplate |
| 43 | 39280 | 40452 | + | 390 | baseplate hub subunit [*Escherichia* phage RB69] | NP\_861894.1 | 0.0/100 | Phage\_tail\_1, Phage\_tail\_2 |
| 44 | 40463 | 40933 | + | 156 | baseplate hub distal subunit [*Escherichia* phage RB69] | NP\_861895.1 | 8.00E-110/99.36 | Phage\_hub\_GP28 |
| 45 | 40954 | 42498 | + | 514 | baseplate hub subunit, tail length determinator [*Shigella* phage SHSML-52-1] | YP\_009289090.1 | 0.0/99.61 | None |
| 46 | 42712 | 43821 | + | 369 | baseplate tail tube [*Escherichia* phage RB69] | NP\_861897.1 | 0.0/99.46 | T4\_tail\_cap |
| 47 | 43821 | 44783 | + | 320 | baseplate tail tube initiator [*Escherichia* phage RB69] | NP\_861898.1 | 0.0/100 | None |
| 48 | 44817 | 45110 | - | 97 | hypothetical protein [*Escherichia* phage vB\_EcoM\_PhAPEC2] | YP\_009056781.1 | 2.00E-63/98.97 | DUF5498 |
| 49 | 45169 | 47256 | - | 695 | ADP-ribosyltransferase exoenzyme [*Escherichia* coli O157 typing phage 3] | YP\_009592761.1 | 0.0/99.86 | ADPrib\_exo\_Tox |
| 50 | 47312 | 47500 | - | 62 | hypothetical protein [*Escherichia* phage HX01] | YP\_006907287.1 | 1.00E-37/100 | None |
| 51 | 47500 | 48993 | - | 497 | DNA ligase [*Escherichia* phage vB\_EcoM\_JS09] | YP\_009037569.1 | 0.0/100 | DNA\_ligase\_A\_M |
| 52 | 48990 | 49259 | - | 89 | hypothetical protein [*Escherichia* phage OLB35] | AYR04118.1 | 6.00E-59/98.88 | DUF3045 |
| 53 | 49269 | 50093 | - | 274 | hypothetical protein [*Escherichia* phage vB\_EcoM\_PhAPEC2] | YP\_009056786.1 | 0.0/99.64 | None |
| 54 | 50090 | 50548 | - | 152 | hypothetical protein [*Escherichia* coli O157 typing phage 3] | YP\_009592756.1 | 3.00E-108/99.34 | NADAR superfamily |
| 55 | 50541 | 50759 | - | 72 | hypothetical protein [*Shigella* phage Shf125875] | YP\_009100747.1 | 1.00E-45/100 | None |
| 56 | 50764 | 51051 | - | 95 | hypothetical protein [*Escherichia* phage vB\_EcoM\_PhAPEC2] | YP\_009056789.1 | 5.00E-65/100 | None |
| 57 | 51091 | 51456 | - | 121 | hypothetical protein [*Escherichia* phage RB69] | NP\_861908.1 | 6.00E-86/100 | Phage\_T4\_Gp30\_7 |
| 58 | 51531 | 51899 | - | 122 | hypothetical protein [*Shigella* phage Shf125875] | YP\_009100750.1 | 1.00E-84/100 | Phage\_30\_8 superfamily |
| 59 | 52030 | 52206 | - | 58 | hypothetical protein [*Escherichia* phage APCEc01] | YP\_009225047.1 | 2.00E-30/98.28 | None |
| 60 | 52579 | 52827 | - | 82 | lysis inhibition accessory protein rapid lysis [*Shigella* phage Shf125875] | YP\_009100752.1 | 3.00E-52/100 | None |
| 61 | 52952 | 53284 | - | 110 | head assembly cochaperone [*Escherichia* phage RB69] | NP\_861912.1 | 2.00E-71/99.09 | Cpn\_10 |
| 62 | 53342 | 53638 | - | 98 | hypothetical protein [*Escherichia* phage OLB35] | AYR04128.1 | 5.00E-64/98.98 | WYL\_2 |
| 63 | 53640 | 54221 | - | 193 | deoxycytidylate deaminase [Enterobacteria phage ATK47] | ANZ50999.1 | 3.00E-141/100 | dCMP\_cyt\_deam\_1 |
| 64 | 54221 | 55213 | - | 330 | hypothetical protein [*Shigella* phage Shf125875] | YP\_009100756.1 | 0.0/100 | DAHP\_synth\_1 |
| 65 | 55334 | 55570 | - | 78 | hypothetical protein [*Shigella* phage JK36] | QEG05800.1 | 2.00E-48/98.72 | None |
| 66 | 55630 | 55905 | - | 91 | hypothetical protein [*Escherichia* phage OLB35] | AYR04132.1 | 5.00E-57/98.90 | None |
| 67 | 55913 | 56128 | - | 71 | hypothetical protein [*Escherichia* phage OLB35] | AYR04133.1 | 2.00E-44/100 | None |
| 68 | 56118 | 56309 | - | 63 | hypothetical protein [*Escherichia* phage RB69] | NP\_861918.1 | 1.00E-37/100 | None |
| 69 | 56309 | 57208 | - | 299 | polynucleotide kinase [*Shigella* phage JK36] | QEG05804.1 | 0.0/99.00 | AAA\_33 |
| 70 | 57205 | 57396 | - | 63 | hypothetical protein [*Shigella* phage SHSML-52-1] | YP\_009289064.1 | 7.00E-38/100 | None |
| 71 | 57396 | 57695 | - | 99 | hypothetical protein [*Escherichia* phage vB\_EcoM\_PhAPEC2] | YP\_009056804.1 | 1.00E-62/97.98 | None |
| 72 | 57753 | 57977 | - | 74 | hypothetical protein [*Shigella* phage Shf125875] | YP\_009100764.1 | 2.00E-45/97.30 | None |
| 73 | 57968 | 58258 | - | 96 | hypothetical protein [*Shigella* phage Shf125875] | YP\_009100765.1 | 5.00E-66/100 | None |
| 74 | 58255 | 58611 | - | 118 | hypothetical protein [*Shigella* phage Shf125875] | YP\_009100766.1 | 2.00E-76/100 | None |
| 75 | 58599 | 59099 | - | 166 | inhibitor of host transcription [*Escherichia* phage p000v] | AYN56191.1 | 5.00E-119/100 | ALP |
| 76 | 59162 | 60286 | - | 374 | RNA ligase 1 and tail fiber attachment catalyst [*Escherichia* phage RB69] | NP\_861926.1 | 0.0/99.73 | RNA\_lig\_T4\_1 |
| 77 | 60342 | 60752 | - | 136 | endonuclease II [*Escherichia* phage RB69] | NP\_861927.1 | 8e-95/100 | GIY-YIG |
| 78 | 60779 | 61954 | - | 391 | ribonucleoside-diphosphate reductase beta [*Escherichia* phage mobillu] | QHR72848.1 | 0.0/99.23 | Ribonuc\_red\_sm |
| 79 | 62010 | 64265 | - | 751 | ribonucleoside-diphosphate reductase alpha [*Escherichia* phage OLB35] | AYR04145.1 | 0.0/99.87 | ATP-cone, ribonuc\_red\_1, Ribonuc\_red\_IgC |
| 80 | 64353 | 64607 | - | 84 | hypothetical protein [*Escherichia* phage] | EFE4843577.1 | 2.00E-53/97.62 | DUF5496 |
| 81 | 64609 | 65469 | - | 286 | thymidylate synthase [*Shigella* phage SHSML-52-1] | YP\_009289053.1 | 0.0/98.95 | Thymidylate\_synth |
| 82 | 65466 | 66053 | - | 195 | dihydrofolate reductase [*Escherichia* phage p000v] | AYN56184.1 | 1.00E-138/96.92 | DHFR\_1 |
| 83 | 66056 | 66304 | - | 82 | hypothetical protein [*Escherichia* phage vB\_EcoM\_PhAPEC2] | YP\_009056816.1 | 6.00E-53/98.78 | DUF5417 |
| 84 | 66367 | 66759 | - | 130 | hypothetical protein [*Escherichia* coli] | EEU1769549.1 | 8.00E-88/99.23 | FRD2 |
| 85 | 66770 | 67021 | - | 83 | hypothetical protein [*Escherichia* phage RB69] | AAP68675.1 | 1.00E-54/98.80 | None |
| 86 | 67136 | 68038 | - | 300 | single stranded DNA binding protein [*Shigella* phage SHSML-52-1] | YP\_009289049.1 | 0.0/100 | gp32 |
| 87 | 68155 | 68808 | - | 217 | helicase loading protein [*Escherichia* phage vB\_EcoM\_PhAPEC2] | YP\_009056819.1 | 2.00E-156/100 | T4\_Gp59\_N, T4\_Gp59\_C |
| 88 | 68805 | 69143 | - | 112 | promoter transcription accessory protein [*Escherichia* phage vB\_EcoM\_PhAPEC2] | YP\_009056820.1 | 5.00E-75/100 | Trans\_coat |
| 89 | 69121 | 69390 | - | 89 | double-stranded DNA binding protein [*Escherichia* phage RB69]  | NP\_861939.1 | 2.00E-56/100 | Phage\_DsbA superfamily |
| 90 | 69398 | 70315 | - | 305 | DNA polymerase I [*Shigella* phage SHSML-52-1] | YP\_009289044.1 | 0.0/99.34 | 5\_3\_exonuc\_N, RNaseH\_C |
| 91 | 70436 | 74269 | + | 1277 | long tail fiber, proximal subunit [*Escherichia* phage OLB35] | AYR04159.1 | 0.0/99.30 | None |
| 92 | 74278 | 75402 | + | 374 | proximal hinge connector of long tail fiber [*Escherichia* coli] | EEU1769099.1 | 0.0/98.93 | ILEI |
| 93 | 75462 | 76118 | + | 218 | distal hinge connector of long tail fiber [*Escherichia* phage RB69] | NP\_861943.1 | 3.00E-158/100 | Phage\_T4\_gp36 |
| 94 | 76127 | 79360 | + | 1077 | long tail fiber distal subunit [Enterobacteria phage vB\_EcoM\_IME340] | AWD91690.1 | 0.0/84.59 | Peptidase\_S74 |
| 95 | 79397 | 80176 | + | 259 | long tail fiber assembly chaperone [*Escherichia* phage vB\_EcoM\_G2540] | QBO63492.1 | 1.00E177/99.23 | GP38 superfamily |
| 96 | 80222 | 80881 | + | 219 | holin lysis [*Escherichia* phage RB69] | NP\_861946.1 | 2.00E-160/99.09 | Phage\_holin\_T |
| 97 | 80882 | 81154 | - | 90 | anti-sigma 70 protein [*Escherichia* phage RB69] | NP\_861947.1 | 5.00E-56/100 | AsiA |
| 98 | 81201 | 81362 | - | 53 | hypothetical protein [*Escherichia* phage PHB12] | QBP05605.1 | 3.00E-28/98.11 | None |
| 99 | 81364 | 81651 | - | 95 | hypothetical protein [*Escherichia* phage vB\_EcoM\_PhAPEC2] | YP\_009056831.1 | 1.00E-62/98.95 | None |
| 100 | 81726 | 81953 | - | 75 | hypothetical protein [*Shigella* phage Shf125875] | YP\_009100794.1 | 6.00E-48/100 | None |
| 101 | 81937 | 82218 | - | 93 | hypothetical protein [*Escherichia* phage RB69] | NP\_861951.1 | 7.00E-62/100 | None |
| 102 | 82218 | 82679 | - | 153 | hypothetical protein [*Escherichia* phage phiE142] | ALY07815.1 | 2.00E-110/100 | None |
| 103 | 82676 | 83020 | - | 114 | hypothetical protein [*Escherichia* phage vB\_EcoM\_PhAPEC2] | YP\_009056836.1 | 2.00E-78/100 | None |
| 104 | 83031 | 83663 | - | 210 | transcriptional regulator [*Escherichia* phage RB69] | NP\_861954.1 | 1.00E-147/100 | MotA\_activ, MotCF |
| 105 | 83853 | 85178 | - | 441 | DNA topoisomerase II medium subunit [*Escherichia* phage phiE142] | ALY07818.1 | 0.0/100 | DNA\_topoisoIV |
| 106 | 85183 | 85323 | - | 46 | hypothetical protein [*Escherichia* phage vB\_EcoM\_PhAPEC2] | YP\_009056840.1 | 3.00E-11/95.65 | None |
| 107 | 85323 | 85469 | - | 48 | hypothetical protein [*Escherichia* coli O157 typing phage 3] | YP\_00959297.1 | 4.00E-24/100 | None |
| 108 | 85522 | 85968 | - | 148 | nucleoid disruption protein [*Escherichia* phage phiE142] | ALY07820.1 | 3.00E-104/99.32 | Phage\_T4\_Ndd |
| 109 | 86045 | 86245 | - | 66 | hypothetical protein [*Escherichia* phage vB\_EcoM\_JS09] | YP\_009037508.1 | 2.00E-41/100 | None |
| 110 | 86496 | 86759 | - | 87 | hypothetical protein [*Escherichia* phage phiE142] | ALY07822.1 | 2.00E-57/100 | None |
| 111 | 86829 | 87305 | - | 158 | endonuclease IV [*Shigella* phage Shf125875] | YP\_009100807.1 | 5.00E-113/99.37 | None |
| 112 | 87322 | 87609 | - | 95 | hypothetical protein [*Shigella* phage Shf125875] | YP\_009100808.1 | 4.00E-63/100 | None |
| 113 | 87651 | 88586 | - | 311 | anti-prophage protein [*Shigella* phage Shf125875] | YP\_009100809.1 | 0.0/98.71 | HTH\_23 |
| 114 | 88596 | 90809 | - | 737 | protector from prophage-induced early lysis [*Escherichia* phage phiE142] | ALY07826.1 | 0.0/99.86 | HATPase\_c |
| 115 | 90822 | 91022 | - | 66 | hypothetical protein [*Escherichia* phage phiE142] | ALY07827.1 | 4.00E-37/100 | None |
| 116 | 91115 | 92215 | - | 366 | hypothetical protein [*Escherichia* phage phiE142] | ALY07828.1 | 0.0/100 | None |
| 117 | 92258 | 93055 | - | 265 | homing endonuclease [*Escherichia* phage phiE142] | ALY07829.1 | 0.0/100 | NUMOD3 |
| 118 | 93055 | 94875 | - | 606 | DNA topoisomerase 4 subunit B [*Escherichia* phage phiE142] | ALY07830.1 | 0.0/100 | HATPase\_c, DNA\_gyraseB, TOPRIM\_C |
| 119 | 94939 | 95364 | - | 141 | hypothetical protein [*Escherichia* phage phiE142] | ALY07831.1 | 5.00E-96/100 | None |
| 120 | 95367 | 95546 | - | 59 | hypothetical protein [*Escherichia* phage RB69] | NP\_861696.1 | 3.00E-36/100 | Zn-ribbon\_8 |
| 121 | 95546 | 95959 | - | 137 | mRNA metabolism modulator [*Escherichia coli*] | EEU1768879.1 | 1.00E-97/100 | None |
| 122 | 95959 | 96186 | - | 75 | modifier of suppressor tRNAs [*Escherichia* phage vB\_EcoM\_JS09] | YP\_009037495.1 | 5.00E-47/100 | None |
| 123 | 96244 | 96768 | - | 174 | hypothetical protein [*Shigella* phage Shf125875] | YP\_009100551.1 | 3.00E-127/100 | None |
| 124 | 96828 | 97247 | - | 139 | hypothetical protein [*Escherichia* phage phiE142] | ALY07836.1 | 4.00E-98/100 | MotB |
| 125 | 97257 | 97784 | - | 175 | transcription factor [*Escherichia* phage phiE142] | ALY07837.1 | 1.00E-124/100 | MotB |
| 126 | 97805 | 98299 | - | 164 | hypothetical protein [*Escherichia* phage phiE142] | ALY07838.1 | 2.00E-117/100 | MotB |
| 127 | 98366 | 99043 | - | 225 | Exonuclease [*Escherichia* phage RB69] | NP\_861704.1 | 5.00E-165/99.11 | DUF5051 |
| 128 | 99053 | 100366 | - | 437 | DNA helicase [*Salmonella enterica* subsp. enterica] | EAA62755484.1 | 0.0/99.54 | AAA\_30, SHE\_14, UvrD\_C\_2 |
| 129 | 100363 | 100674 | - | 103 | hypothetical protein [*Escherichia* phage phiE142] | ALY07841.1 | 1.00E-68/100 | None |
| 130 | 100677 | 101423 | - | 248 | putative anti-sigma factor [*Escherichia* phage PHB12] | QBP05638.1 | 2.00E-178/99.60 | None |
| 131 | 101577 | 102185 | - | 202 | RNA polymerase [*Escherichia* phage phiE142] | ALY07843.1 | 9.00E-150/100 | None |
| 132 | 102243 | 102377 | - | 44 | hypothetical protein [*Escherichia* phage phiE142] | ALY07844.1 | 5.00E-23/100 | None |
| 133 | 102433 | 102597 | - | 54 | hypothetical protein [*Escherichia* phage phiE142] | ALY07845.1 | 5.00E-29/98.15 | None |
| 134 | 102594 | 102773 | - | 59 | hypothetical protein [*Escherichia* phage vB\_EcoM\_PhAPEC2] | YP\_009056612.1 | 7.00E-34/98.31 | None |
| 135 | 102775 | 103239 | - | 154 | hypothetical protein [*Escherichia* coli O157 typing phage 3] | YP\_009592943.1 | 6.00E-109/99.35 | None |
| 136 | 103239 | 103418 | - | 59 | hypothetical protein [*Escherichia* phage RB69] | NP\_861714.1 | 3.00E-32/96.61 | None |
| 137 | 103415 | 103651 | - | 78 | capsid vertex protein [*Shigella* phage Shf125875] | YP\_009100565.1 | 3.00E-48/98.72 | None |
| 138 | 103617 | 103844 | - | 75 | hypothetical protein [*Shigella* phage Shf125875] | YP\_009100566.1 | 1.00E-48/100 | None |
| 139 | 103948 | 104184 | - | 78 | small outer capsid protein [*Shigella* phage SHSML-52-1] | YP\_0092588994.1 | 3.00E-48/94.87 | Soc |
| 140 | 104226 | 104747 | - | 173 | dCTP pyrophosphatase [*Escherichia* phage vB\_EcoM\_JS09] | YP\_009037477.1 | 7.00E-126/100 | dUTPase\_2 |
| 141 | 104837 | 105034 | + | 65 | hypothetical protein [*Escherichia* phage phiE142] | ALY07853.1 | 2.00E-34/98.46 | None |
| 142 | 105031 | 106053 | - | 340 | DNA primase [*Escherichia* phage phiE142] | ALY07854.1 | 0.0/100 | Toprim\_N |
| 143 | 106093 | 106560 | - | 155 | hypothetical protein [*Escherichia* phage vB\_EcoM\_JS09] | YP\_009037474.1 | 3.00E-110/100 | Gp23 super |
| 144 | 106580 | 106777 | - | 65 | hypothetical protein [*Xanthomonas pisi*] | WP\_046965606.1 | 8.00E-40/100 | None |
| 145 | 106779 | 107429 | - | 216 | hypothetical protein [*Escherichia* phage OLB35] | AYR03943.1 | 3.00E-158/99.07 | None |
| 146 | 107431 | 107724 | - | 97 | hypothetical protein [*Escherichia* phage HX01] | YP\_006907258.1 | 5.00E-66/100 | None |
| 147 | 107788 | 108036 | - | 82 | immunity to superinfection membrane protein [*Escherichia* phage RB69] | NP\_861726.1 | 5.00E-49/100 | Imm\_superinfect |
| 148 | 108098 | 108466 | - | 122 | putative membrane protein [*Escherichia* phage vB\_EcoM\_JS09] | YP\_009037469.1 | 2.00E-86/100 | DUF5481 |
| 149 | 108539 | 108727 | - | 62 | discriminator of mRNA degradation [*Escherichia* coli O157 typing phage 3] | YP\_009592927.1 | 7.00E-36/100 | Dmd |
| 150 | 108724 | 109041 | - | 105 | hypothetical protein [*Escherichia* phage phiE142] | ALY07862.1 | 3.00E-73/100 | None |
| 151 | 109097 | 109471 | - | 124 | hypothetical protein [*Escherichia* phage RB69] | NP\_861731.1 | 2.00E-86/100 | None |
| 152 | 109560 | 111002 | - | 480 | replicative DNA helicase [*Shigella* phage Shf125875] | YP\_009100583.1 | 0.0/99.79 | DnaB\_C, P-loop\_NTPase superfamily |
| 153 | 111012 | 111353 | - | 113 | putative head vertex assembly chaperone [*Escherichia* phage vB\_EcoM\_JS09] | YP\_009037463.1 | 7.00E-77/100 | Phage\_head\_chap |
| 154 | 111346 | 112518 | - | 390 | UvsX RecA-like recombination protein [*Escherichia* phage RB69] | NP\_861734.1 | 0.0/100 | P-loop\_NTPase superfamily |
| 155 | 112617 | 113165 | - | 182 | hypothetical protein [*Escherichia* coli O157 typing phage 3] | YP\_009592921.1 | 5.00E-132/100 | None |
| 156 | 113167 | 114066 | - | 299 | hypothetical protein [*Escherichia* phage APCEc01] | YP\_009225218.1 | 0.0/100 | None |
| 157 | 114066 | 114782 | - | 238 | hypothetical protein [*Escherichia* phage vB\_EcoM\_JS09] | YP\_009037459.1 | 5.00E-180/100 | Thymidylat\_synt |
| 158 | 114825 | 115064 | - | 79 | hypothetical protein [*Escherichia* phage phiE142] | ALY07870.1 | 1.00E-49/100 | None |
| 159 | 115061 | 116221 | - | 386 | hypothetical protein [*Escherichia* phage vB\_EcoM\_G53] | QBO65187.1 | 0.0/100 | Peptidase\_U32 |
| 160 | 116279 | 116665 | - | 128 | hypothetical protein [*Escherichia* phage vB\_EcoM\_JS09] | YP\_009037456.1 | 6.00E-91/100 | None |
| 161 | 116665 | 118350 | - | 561 | hypothetical protein [*Escherichia* phage moha] | QHR68268.1 | 0.0/100 | NTP\_tranferase, APH |
| 162 | 118392 | 118535 | - | 47 | hypothetical protein [*Shigella* phage Shf125875] | YP\_009100593.1 | 6.00E-24/100 | None |
| 163 | 118532 | 119167 | - | 211 | hypothetical protein protein [*Escherichia* phage vB\_EcoM\_PhAPEC2] | YP\_009056639.1 | 3.00E-154/99.53 | SIS |
| 164 | 119208 | 121919 | - | 903 | DNA polymerase [*Escherichia* phage phiE142] | ALY07876.1 | 0.0/100 | DNA\_pol\_B\_exo1, DNA\_pol\_B |
| 165 | 122001 | 122378 | - | 125 | putative transcriptional protein [*Escherichia* phage RB69] | NP\_861747.1 | 2.00E-86/100 | Translat\_reg |
| 166 | 122372 | 122935 | - | 187 | clamp loader small subunit [*Escherichia* phage RB69] | NP\_861748.1 | 7.00E-133/99.47 | Phage\_clamp\_A |
| 167 | 122937 | 123899 | - | 320 | clamp loader subunit [*Escherichia* phage APCEc01] | YP\_009225207.1 | 0.0/100 | AAA |
| 168 | 123975 | 124661 | - | 228 | sliding clamp [*Escherichia* phage RB69] | NP\_861750.1 | 4.00E-165/100 | DNA\_PPF, gp45-slide\_C |
| 169 | 124704 | 125120 | - | 138 | RNA polymerase binding protein [*Escherichia* phage RB69] | NP\_861751.1 | 9.00E-99/100 | Phage\_RbpA |
| 170 | 125133 | 125321 | - | 62 | hypothetical protein [*Escherichia* phage RB69] | NP\_861752.1 | 2.00E-38/100 | Gp45\_2 |
| 171 | 125376 | 127064 | - | 562 | endonuclease subunit [*Shigella* phage SHSML-52-1] | YP\_009289229.1 | 0.0/99.82 | AAA\_23, KBP\_C |
| 172 | 127061 | 127300 | - | 79 | hypothetical protein [*Luteibacter rhizovicinus*] | WP\_046969771.1 | 1.00E-50/100 | DUF5487 |
| 173 | 127287 | 127544 | - | 85 | hypothetical protein [*Shigella* phage SHSML-52-1] | YP\_009289227.1 | 8.00E-55/100 | None |
| 174 | 127541 | 128560 | - | 339 | endonuclease subunit [*Escherichia* phage RB69] | NP\_861756.1 | 0.0/100 | None |
| 175 | 128630 | 128803 | - | 57 | hypothetical protein [*Escherichia* phage APCEc01] | YP\_009225199.1 | 7.00E-34/100 | DUF5486 |
| 176 | 128843 | 129049 | - | 68 | hypothetical protein [*Escherichia* phage HX01] | YP\_006907251.1 | 1.00E-42/100 | None |
| 177 | 129024 | 129347 | - | 107 | hypothetical protein [*Escherichia* phage RB69] | NP\_861759.1 | 7.00E-69/99.07 | DUF2654 superfamily |
| 178 | 129349 | 129564 | - | 71 | hypothetical protein [*Escherichia* phage APCEc01] | YP\_009225196.1 | 3.00E-44/100 | DUF5491 |
| 179 | 129548 | 130105 | - | 185 | RNA polymerase sigma factor [*Escherichia* phage vB\_EcoM\_JS09] | YP\_009037438.1 | 6.00E-135/100 | None |
| 180 | 130261 | 130488 | - | 75 | hypothetical protein [*Escherichia* phage phiE142] | ALY07892.1 | 2.00E-46/100 | DUF5495 |
| 181 | 130485 | 130817 | - | 110 | hypothetical protein [*Escherichia* coli O157 typing phage 3] | YP\_009592894.1 | 3.00E-73/99.09 | None |
| 182 | 131188 | 131388 | - | 66 | hypothetical protein [*Escherichia* phage vB\_EcoM\_PhAPEC2] | YP\_009056657.1 | 1.00E-41/98.48 | DUF5490 |
| 183 | 131385 | 131519 | - | 44 | hypothetical protein [*Shigella* phage Shf125875] | YP\_009100615.1 | 5.00E-23/97.73 | DUF5484 |
| 184 | 131527 | 131820 | - | 97 | hypothetical protein [*Escherichia* phage vB\_EcoM\_JS09] | YP\_009037431.1 | 3.00E-63/100 | DUF5499 |
| 185 | 131828 | 132076 | - | 82 | hypothetical protein [*Escherichia* phage phiE142] | ALY07898.1 | 3.00E-51/100 | None |
| 186 | 132073 | 132255 | - | 60 | hypothetical protein [*Escherichia* phage phiE142] | ALY07899.1 | 6.00E-36/100 | None |
| 187 | 132320 | 132436 | + | 38 | hypothetical protein [*Escherichia* phage phiE142] | ALY07900.1 | 5.00E-19/100 | None |
| 188 | 132423 | 132746 | - | 107 | Glutaredoxin [*Escherichia* phage vB\_EcoM\_JS09] | YP\_009037428.1 | 3.00E-71/100 | Glutaredoxin |
| 189 | 132712 | 133029 | - | 105 | hypothetical protein [*Escherichia* phage vB\_EcoM\_PhAPEC2] | YP\_009056663.1 | 4.00E-71/100 | None |
| 190 | 133032 | 133247 | - | 71 | hypothetical protein [*Escherichia* phage RB69] | NP\_861773.1 | 8.00E-42/100 | None |
| 191 | 133264 | 133365 | - | 33 | hypothetical protein [*Escherichia* phage vB\_EcoM\_NBG1] | AWM11960.1 | 1.00E-14/100 | None |
| 192 | 133358 | 133828 | - | 156 | anaerobic NTP reductase small subunit [*Escherichia* phage phiE142] | ALY07905.1 | 2.00E-112/100 | Fer4\_12 |
| 193 | 133825 | 135642 | - | 605 | large subunit anaerobic ribonucleotide reductase [*Escherichia* phage phiE142] | ALY07906.1 | 0.0/99.83 | NRDD |
| 194 | 135639 | 136112 | - | 157 | endonuclease VII [*Shigella* phage JK42] | QEG06199.1 | 6.00E-113/99.36 | Endonuclease\_7 |
| 195 | 136152 | 136331 | - | 59 | hypothetical protein [*Escherichia* phage vB\_EcoM\_JS09] | YP\_009037422.1 | 8.00E-36/100 | None |
| 196 | 136341 | 136754 | - | 137 | peptidase inhibitor [*Escherichia* phage vB\_EcoM\_NBG1] | AWM11821.1 | 2.00E-94/99.27 | Inhibitor\_I24 |
| 197 | 136756 | 136926 | - | 56 | hypothetical protein [*Escherichia* phage vB\_EcoM\_JS09] | YP\_009037420.1 | 3.00E-33/100 | None |
| 198 | 137055 | 137411 | - | 118 | hypothetical protein [*Shigella* phage Shf125875] | YP\_009100627.1 | 2.00E-78/98.31 | None |
| 199 | 137430 | 137726 | - | 98 | hypothetical protein [*Escherichia* phage SF] | AWY07914.1 | 1.00E-64/96.94 | None |
| 200 | 137723 | 137986 | - | 87 | putative thioredoxin [*Escherichia* phage vB\_EcoM\_PhAPEC2] | YP\_009056671.1 | 5.00E-58/100 | Glutaredoxin |
| 201 | 137979 | 138392 | - | 137 | hypothetical protein [*Escherichia* phage RB69] | NP\_861784.1 | 3.00E-95/100 | None |
| 202 | 138392 | 138697 | - | 101 | hypothetical protein [*Escherichia* phage phiE142] | ALY07913.1 | 5.00E-69/100 | None |
| 203 | 138697 | 139647 | - | 316 | hypothetical protein [*Escherichia* phage phiE142] | ALY07914.1 | 0.0/100 | None |
| 204 | 139710 | 140669 | - | 319 | hypothetical protein [*Escherichia* phage phiE142] | ALY07915.1 | 0.0/100 | None |
| 205 | 140725 | 141720 | - | 331 | hypothetical protein [*Escherichia* phage phiE142] | ALY07916.1 | 0.0/100 | None |
| 206 | 141783 | 142310 | - | 175 | hypothetical protein [*Escherichia* phage phiE142] | ALY07917.1 | 5.00E-123/100 | None |
| 207 | 142369 | 142644 | - | 91 | hypothetical protein [*Escherichia* phage phiE142] | ALY07918.1 | 8.00E-59/100 | None |
| 208 | 142652 | 143632 | - | 326 | hypothetical protein [*Escherichia* phage phiE142] | ALY07919.1 | 0.0/100 | None |
| 209 | 143703 | 143921 | - | 72 | hypothetical protein [*Escherichia* phage phiE142] | ALY07920.1 | 4.00E-44/100 | None |
| 210 | 144028 | 145014 | - | 328 | hypothetical protein [*Escherichia* phage phiE142] | ALY07921.1 | 0.0/100 | Nuc-transf superfamily |
| 211 | 145014 | 145487 | - | 157 | hypothetical protein [*Escherichia* phage vB\_EcoM\_PhAPEC2] | YP\_009056682.1 | 9.00E-109/99.36 | None |
| 212 | 145497 | 146027 | - | 176 | hypothetical protein [*Escherichia* phage vB\_EcoM\_G53] | QBO65239.1 | 5.00E-123/97.16 | None |
| 213 | 146029 | 146208 | - | 59 | hypothetical protein [*Shigella* phage Shf125875] | YP\_009100642.1 | 4.00E-34/100 | None |
| 214 | 146205 | 146315 | - | 36 | hypothetical protein [*Escherichia* phage vB\_EcoM\_PhAPEC2] | YP\_009056684.1 | 3.00E-15/97.22 | None |
| 215 | 146373 | 146579 | - | 68 | hypothetical protein [*Escherichia* phage Av-05] | YP\_009111275.1 | 8.00E-43/100 | None |
| 216 | 146587 | 146766 | - | 59 | hypothetical protein [*Shigella* phage Shf125875] | YP\_009100644.1 | 2.00E-35/100 | None |
| 217 | 146927 | 147169 | - | 80 | hypothetical protein [Tubulin-specific chaperone E *Cryptotermes secundus*] | PNF32444.1 | 4.3/42.46 | None |
| 218 | 147182 | 147394 | - | 70 | hypothetical protein [*Escherichia* phage RB69] | NP\_861800.1 | 3.00E-42/100 | None |
| 219 | 147422 | 148003 | - | 193 | thymidine kinase [*Escherichia* phage RB69] | NP\_861801.1 | 2.00E-141/100 | TK superfamily |
| 220 | 148013 | 148195 | - | 60 | hypothetical protein [*Escherichia* phage vB\_EcoM\_PhAPEC2] | YP\_009056692.1 | 6.00E-34/100 | None |
| 221 | 148192 | 148398 | - | 68 | hypothetical protein [*Escherichia* phage F2] | QIG57338.1 | 2.00E-43/100 | None |
| 222 | 148395 | 148607 | - | 70 | hypothetical protein [*Escherichia* phage Av-05] | YP\_009111268.1 | 3.00E-45/100 | None |
| 223 | 148604 | 149071 | - | 155 | hypothetical protein [*Escherichia* phage Av-05] | YP\_009111267.1 | 2.00E-110/100 | Macro |
| 224 | 149064 | 149402 | - | 112 | hypothetical protein [*Escherichia* phage Av-05] | YP\_009111266.1 | 9.00E-77/100 | None |
| 225 | 149408 | 149950 | - | 180 | hypothetical protein [*Escherichia* phage RB69] | NP\_861805.1 | 9.00E-129/100 | None |
| 226 | 149959 | 150417 | - | 152 | site-specific RNA endonuclease [*Escherichia* phage Av-05] | YP\_009111264.1 | 3.00E-108/100 | None |
| 227 | 150479 | 150694 | - | 71 | hypothetical protein [*Escherichia* phage Av-05] | YP\_009111263.1 | 5.00E-45/100 | None |
| 228 | 150694 | 150960 | - | 88 | hypothetical protein [*Escherichia* phage Av-05] | YP\_009111262.1 | 4.00E-58/100 | None |
| 229 | 150950 | 151174 | - | 74 | hypothetical protein [*Escherichia* phage Av-05] | YP\_009111261.1 | 2.00E-47/100 | None |
| 230 | 151174 | 151536 | - | 120 | hypothetical protein [*Escherichia* phage Av-05] | YP\_009111260.1 | 1.00E-82/100 | Gly\_radical, RNR\_PFL superfamily |
| 231 | 151543 | 151851 | - | 102 | Endoribonuclease [*Escherichia* phage RB69] | NP\_861811.1 | 4.00E-71/100 | None |
| 232 | 151848 | 152351 | - | 167 | hypothetical protein [*Escherichia* phage Av-05] | YP\_009111258.1 | 3.00E-122/100 | None |
| 233 | 152562 | 152891 | - | 109 | hypothetical protein [*Escherichia* phage Av-05] | YP\_009111257.1 | 4.00E-72/100 | None |
| 234 | 152921 | 153499 | - | 192 | internal head protein [*Escherichia* phage Av-05] | YP\_009111256.1 | 2.00E-135/100 | None |
| 235 | 153563 | 153823 | - | 86 | hypothetical protein [*Escherichia* phage phiE142] | ALY07945.1 | 3.00E-52/96.51 | None |
| 236 | 153830 | 154243 | - | 137 | endonuclease V N-glycosylase UV repair enzyme [*Escherichia* phage Av-05] | YP\_009111254.1 | 3.00E-97/100 | Pyr\_excise |
| 237 | 154302 | 154583 | - | 93 | hypothetical protein [*Bacillus cereus*] | WP\_016059058.1 | 2.00E-58/100 | None |
| 238 | 154580 | 155068 | - | 162 | lysozyme murein hydrolase [*Escherichia* phage vB\_EcoM\_JS09] | YP\_009037377.1 | 2.00E-116/100 | Lyz\_like superfamily |
| 239 | 155103 | 155558 | - | 151 | nudix hydrolase [*Escherichia* phage Av-05] | YP\_009111251.1 | 2.00E-110/100 | Nudix |
| 240 | 155551 | 155787 | - | 78 | hypothetical protein [*Shigella* phage Shf125875]  | YP\_009100666.1 | 2.00E-47/100 | None |
| 241 | 155784 | 156275 | - | 163 | putative membrane protein [*Escherichia* phage Av-05] | YP\_009111249.1 | 1.00E-113/100 | None |
| 242 | 156275 | 156961 | - | 228 | hypothetical protein [*Escherichia* phage Av-05] | YP\_009111248.1 | 7.00E-171/100 | None |
| 243 | 156963 | 157268 | - | 101 | hypothetical protein [*Escherichia* phage Av-05] | YP\_009111247.1 | 1.00E-68/100 | None |
| 244 | 157339 | 158295 | - | 318 | hypothetical protein [*Escherichia* phage Av-05] | ALY07954.1 | 0.0/100 | None |
| 245 | 158324 | 158563 | - | 79 | hypothetical protein [*Escherichia* phage ST0] | YP\_009608535.1 | 1.00E-51/100 | None |
| 246 | 158626 | 158823 | - | 65 | hypothetical protein [*Escherichia* phage RB69] | NP\_861826.1 | 5.00E-38/98.46 | None |
| 247 | 158833 | 159105 | - | 90 | hypothetical protein [*Escherichia* phage phiE142] | ALY07957.1 | 2.00E-60/100 | None |
| 248 | 159115 | 159420 | - | 101 | hypothetical protein [*Escherichia* phage vB\_EcoM\_JS09] | YP\_009037366.1 | 6.00E-67/100 | None |
| 249 | 159519 | 159890 | - | 123 | hypothetical protein [*Escherichia* phage phiE142] | ALY07959.1 | 2.00E-85/100 | None |
| 250 | 159880 | 160476 | - | 198 | hypothetical protein [*Escherichia* phage phiE142] | ALY07960.1 | 1.00E-145/100 | None |
| 251 | 160526 | 161119 | - | 197 | hypothetical protein [*Escherichia* phage phiE142] | ALY07961.1 | 5.00E-136/100 | None |
| 252 | 161191 | 161418 | - | 75 | hypothetical protein [*Shigella* phage SHSML-52-1] | YP\_009289148.1 | 1.00E-48/100 | Phage\_FRD3 |
| 253 | 161477 | 161980 | - | 167 | hypothetical protein [*Escherichia* phage phiE142] | ALY07963.1 | 4.00E-117/100 | None |
| 254 | 162038 | 162301 | - | 87 | hypothetical protein [*Escherichia* phage RB69] | NP\_861837.1 | 6.00E-57/97.70 | None |
| 255 | 162540 | 163103 | - | 187 | hypothetical protein [*Escherichia* phage phiE142] | ALY07965.1 | 3.00E-129/98.93 | None |
| 256 | 163229 | 163693 | - | 154 | hypothetical protein [*Escherichia* phage phiE142] | ALY07966.1 | 2.00E-106/100 | None |
| 257 | 164078 | 164422 | - | 114 | hypothetical protein [*Escherichia* phage phiE142] | ALY07967.1 | 2.00E-77/97.37 | None |
| 258 | 164677 | 165192 | - | 171 | hypothetical protein [*Escherichia* phage phiE142] | ALY07968.1 | 1.00E-119/99.42 | None |
| 259 | 165197 | 165487 | - | 96 | hypothetical protein [*Escherichia* phage phiE142] | ALY07969.1 | 3.00E-63/100 | None |
| 260 | 165484 | 165846 | - | 120 | hypothetical protein [*Escherichia* phage phiE142] | ALY07970.1 | 2.00E-84/99.17 | None |
| 261 | 165847 | 166032 | - | 61 | hypothetical protein [*Escherichia* phage RB69] | NP\_861844.1 | 2.00E-33/100 | None |
| 262 | 166104 | 166391 | - | 95 | internal head protein with nuclease inhibitor activity [*Escherichia* phage vB\_EcoM\_PhAPEC2] | YP\_009056732.1 | 2.00E-60/100 | IPI\_T4 |
| 263 | 166469 | 166924 | - | 151 | hypothetical protein [*Escherichia* phage RB69] | NP\_861847.1 | 8.00E-108/100 | None |
| 264 | 166924 | 167154 | - | 76 | tail fiber chaperone [*Escherichia* phage RB69] | NP\_861848.1 | 2.00E-42/100 | Gp57 |
| 265 | 167159 | 167893 | - | 244 | deoxynucleoside monophosphate kinase [*Escherichia* phage vB\_EcoM\_PhAPEC2] | YP\_009056735.1 | 1.00E-176/99.18 | None |
| 266 | 167948 | 168532 | - | 194 | tail completion and sheath stabilizer protein [*Shigella* phage Shf125875] | YP\_009100693.1 | 3.00E-143/100 | Phage\_T4\_gp19 |
| 267 | 168635 | 169456 | - | 273 | DNA end protector protein [*Shigella* phage Shf125875] | YP\_009100694.1 | 0.0/100 | None |
| 268 | 169459 | 169908 | - | 149 | head completion protein [*Escherichia* phage vB\_EcoM\_PhAPEC2] | YP\_009056738.1 | 7.00E-106/100 | Tn7\_Tnp\_TnsA\_N |
| 269 | 169970 | 170545 | + | 191 | baseplate wedge subunit [*Escherichia* phage RB69] | Np\_861853.1 | 5.00E-138/100 | Phage\_gp53 superfamily |
| 270 | 170545 | 172278 | + | 577 | baseplate hub subunit and tail lysozyme [*Escherichia* phage p000v] | AYN56263.1 | 0.0/99.65 | GP5\_OB superfamily, Lyz\_like superfamily |
| 271 | 172324 | 172797 | + | 157 | hypothetical protein [*Escherichia* phage phiE142] | Aly07982.1 | 6.00E-112/100 | None |
| 272 | 172800 | 173093 | + | 97 | baseplate hub needle [*Shigella* phage Shf125875] | YP\_009100699.1 | 2.00E-64/100 | PAAR\_motif |
| 273 | 173102 | 175072 | + | 656 | baseplate wedge subunit [*Escherichia* phage phiE142] | ALY07984.1 | 0.0/100 | None |
| 274 | 175069 | 178167 | + | 1032 | baseplate wedge initiator [*Escherichia* coli] | EFE4843651.1 | 0.0/99.81 | None |
| 275 | 178160 | 179164 | + | 334 | baseplate wedge subunit [*Escherichia* phage RB69] | NP\_861859.1 | 0.0/100 | Phage-Gp8 superfamily |
| 276 | 179227 | 180090 | + | 287 | baseplate wedge connector for long tail fiber [*Shigella* phage Shf125875] | YP\_009100703.1 | 0.0/99.65 | T4\_gp9\_10 |
| 277 | 180090 | 181904 | + | 604 | baseplate wedge subunit and tail pin [*Escherichia* phage PHB12] | QBP05779.1 | 0.0/99.50 | T4\_gp9\_10 |
| 278 | 181904 | 182563 | + | 219 | baseplate wedge subunit and tail pin [*Escherichia* phage phiE142] | ALY07989.1 | 3.00E-158/100 | GP11 superfamily |
| 279 | 182560 | 184110 | + | 516 | short tail fibers [*Escherichia* phage phiE142] | ALY07990.1 | 0.0/100 | Gp12-short\_mid, Collar, S\_tail-recep\_bd |
| 280 | 184120 | 185562 | + | 480 | fibritin neck whiskers [*Escherichia* phage phiE142] | ALY07991.1 | 0.0/100 | Fibritin\_C |
| 281 | 185595 | 186536 | + | 313 | neck protein [*Escherichia* phage vB\_EcoM\_JS09] | YP-009037597.1 | 0.0/98.40 | None |

\*aa, amino acids.