

Table S1: Annotation of the crAssE-Sib genome

| # | Putative product | Coordinates, bp | Length, bp | Direction | Type |
|-----|---------------------------------------|-----------------|------------|-----------|------|
| 1. | hypothetical protein | 83..289 | 207 | - | CDS |
| 2. | hypothetical protein | 312..482 | 171 | - | CDS |
| 3. | hypothetical protein | 556..843 | 288 | - | CDS |
| 4. | hypothetical protein | 1038..1577 | 540 | - | CDS |
| 5. | hypothetical protein | 1938..2105 | 168 | - | CDS |
| 6. | hypothetical protein | 2226..2618 | 393 | - | CDS |
| 7. | Phosphodiesterase | 2615..3571 | 957 | - | CDS |
| 8. | Polynucleotide kinase, 3' phosphatase | 3537..4409 | 873 | - | CDS |
| 9. | hypothetical protein | 4409..4819 | 411 | - | CDS |
| 10. | xyloglucanase | 5004..5660 | 657 | + | CDS |
| 11. | putative DNA binding protein | 5691..5960 | 270 | - | CDS |
| 12. | MmcB-like DNA repair protein | 5957..6649 | 693 | - | CDS |
| 13. | tRNA | 6667..6738 | 72 | - | tRNA |
| 14. | tRNA | 6742..6813 | 72 | - | tRNA |
| 15. | tRNA | 6883..6953 | 71 | - | tRNA |
| 16. | tRNA | 6955..7027 | 73 | - | tRNA |
| 17. | ATPase | 7173..7898 | 726 | - | CDS |
| 18. | dUTPase | 7923..8573 | 651 | - | CDS |
| 19. | hypothetical protein | 8576..8824 | 249 | - | CDS |
| 20. | ssDNA binding protein | 8880..9827 | 948 | - | CDS |
| 21. | DNA polymerase III subunit beta | 9840..10,949 | 1110 | - | CDS |
| 22. | Holliday junction resolvase | 11,047..11,580 | 534 | - | CDS |
| 23. | hypothetical protein | 11,587..12,021 | 435 | - | CDS |
| 24. | hypothetical protein | 12,018..12,266 | 249 | - | CDS |
| 25. | hypothetical protein | 12,271..12,573 | 303 | - | CDS |
| 26. | Thymidylate synthase | 12,570..13,442 | 873 | - | CDS |
| 27. | putative DNA binding protein | 13,518..13,718 | 201 | - | CDS |
| 28. | DUF2829 domain-containing protein | 13,792..14,061 | 270 | - | CDS |
| 29. | ATP dependent DNA helicase | 14,114..15,541 | 1428 | - | CDS |
| 30. | hypothetical protein | 15,799..17,367 | 1569 | - | CDS |
| 31. | hypothetical protein | 17,421..17,633 | 213 | + | CDS |
| 32. | hypothetical protein | 17,717..18,157 | 441 | + | CDS |
| 33. | DNA-binding protein | 18,144..18,593 | 450 | + | CDS |
| 34. | HYDIN-like protein | 18,609..19,334 | 726 | + | CDS |
| 35. | hypothetical protein | 19,338..19,619 | 282 | + | CDS |
| 36. | hypothetical protein | 19,606..20,127 | 522 | + | CDS |
| 37. | putative terminase small subunit | 20,105..20,443 | 339 | + | CDS |
| 38. | Terminase large subunit | 20,406..23,219 | 2814 | + | CDS |
| 39. | Portal protein | 23,261..26,020 | 2760 | + | CDS |
| 40. | Structural protein | 26,147..27,313 | 1167 | + | CDS |
| 41. | Major capsid protein | 27,336..29,036 | 1701 | + | CDS |
| 42. | hypothetical protein | 29,112..30,200 | 1089 | + | CDS |

| | | | | | |
|-----|---|----------------|------|---|---------|
| 43. | Ring protein | 30,204..30,878 | 675 | + | CDS |
| 44. | Structural protein | 31,021..33,009 | 1989 | + | CDS |
| 45. | hypothetical protein | 33,101..34,843 | 1743 | + | CDS |
| 46. | Tetratricopeptide repeat family protein | 34,828..35,139 | 312 | + | CDS |
| 47. | Pentaxin family protein | 35,139..37,247 | 2109 | + | CDS |
| 48. | hypothetical protein | 37,249..37,521 | 273 | + | CDS |
| 49. | Putative structural protein | 37,607..37,825 | 219 | + | CDS |
| 50. | Collagen triple helix repeat protein | 37,829..38,878 | 1050 | + | CDS |
| 51. | Carbohydrate binding domain protein | 38,894..40,006 | 1113 | + | CDS |
| 52. | Peptidase M15 | 40,137..40,598 | 462 | + | CDS |
| 53. | transmembrane protein | 40,600..41,187 | 588 | + | CDS |
| 54. | hypothetical protein | 41,184..41,636 | 453 | + | CDS |
| 55. | Structural protein | 41,720..42,598 | 879 | + | CDS |
| 56. | hypothetical protein | 42,620..42,946 | 327 | + | CDS |
| 57. | hypothetical protein | 42,948..43,199 | 252 | + | CDS |
| 58. | Protein of unknown function DUF5977 | 43,196..43,834 | 639 | + | CDS |
| 59. | receptor binding protein | 43,837..45,894 | 2058 | + | CDS |
| 60. | VR | 45,751..45,846 | 96 | + | feature |
| 61. | IMH | 45,847..45,862 | 16 | + | feature |
| 62. | TR | 46,215..46,310 | 96 | + | feature |
| 63. | IMH* | 46,311..46,326 | 16 | + | feature |
| 64. | Reverse transcriptase | 46,419..47,816 | 1398 | + | CDS |
| 65. | hypothetical protein | 47,838..48,230 | 393 | + | CDS |
| 66. | hypothetical protein | 48,205..48,483 | 279 | + | CDS |
| 67. | hypothetical protein | 48,467..48,892 | 426 | + | CDS |
| 68. | hypothetical protein | 48,909..49,295 | 387 | + | CDS |
| 69. | cellulase | 49,312..50,091 | 780 | + | CDS |
| 70. | Carbohydrate-binding protein | 50,078..54,589 | 4512 | + | CDS |
| 71. | hypothetical protein | 54,719..54,841 | 123 | + | CDS |
| 72. | hypothetical protein | 54,904..55,320 | 417 | + | CDS |
| 73. | hypothetical protein | 55,289..55,678 | 390 | + | CDS |
| 74. | Ring protein | 55,675..56,379 | 705 | + | CDS |
| 75. | hypothetical protein | 56,451..56,945 | 495 | + | CDS |
| 76. | Phage antirepressor protein | 57,049..58,002 | 954 | + | CDS |
| 77. | Ring protein | 58,086..58,982 | 897 | + | CDS |
| 78. | RNA-guided endonuclease TnpB family protein | 58,986..60,125 | 1140 | - | CDS |
| 79. | hypothetical protein | 60,269..60,433 | 165 | + | CDS |
| 80. | Putative tail protein | 60,439..61,167 | 729 | + | CDS |
| 81. | hypothetical protein | 61,172..62,305 | 1134 | + | CDS |
| 82. | periplasmic metallopeptidase | 62,289..62,750 | 462 | + | CDS |
| 83. | hypothetical protein | 62,743..63,204 | 462 | + | CDS |
| 84. | hypothetical protein | 63,285..64,007 | 723 | + | CDS |
| 85. | hypothetical protein | 64,017..64,115 | 99 | + | CDS |
| 86. | RNA-guided endonuclease TnpB family protein | 64,190..65,413 | 1224 | + | CDS |

| | | | | | |
|------|---------------------------------------|------------------|------|---|------|
| 87. | Muzzle protein | 65,628..72,401 | 6774 | + | CDS |
| 88. | tRNA | 72,756..72,828 | 73 | + | tRNA |
| 89. | tRNA | 72,901..72,974 | 74 | + | tRNA |
| 90. | Ribonucleoprotein | 73,091..74,725 | 1635 | + | CDS |
| 91. | hypothetical protein | 74,851..75,264 | 414 | + | CDS |
| 92. | Phage tail lysozyme | 75,248..77,668 | 2421 | + | CDS |
| 93. | hypothetical protein | 78,420..79,439 | 1020 | + | CDS |
| 94. | Structural protein | 79,508..82,348 | 2841 | + | CDS |
| 95. | Structural protein | 82,426..85,407 | 2982 | + | CDS |
| 96. | Structural protein | 85,400..92,026 | 6627 | + | CDS |
| 97. | hypothetical protein | 92,029..92,607 | 579 | + | CDS |
| 98. | DNA-dependent RNA polymerase | 92,650..94,908 | 2259 | + | CDS |
| 99. | Repressor protein | 95,129..95,353 | 225 | + | CDS |
| 100. | Phage antirepressor protein | 95,605..96,489 | 885 | + | CDS |
| 101. | Spike protein/glycoprotein | 96,609..97,673 | 1065 | + | CDS |
| 102. | hypothetical protein | 97,697..98,110 | 414 | + | CDS |
| 103. | hypothetical protein | 98,161..98,655 | 495 | + | CDS |
| 104. | hypothetical protein | 98,663..99,040 | 378 | + | CDS |
| 105. | hypothetical protein | 99,134..99,427 | 294 | + | CDS |
| 106. | hypothetical protein | 99,370..99,549 | 180 | + | CDS |
| 107. | DNA binding protein | 99,597..99,767 | 171 | + | CDS |
| 108. | hypothetical protein | 99,896..100,123 | 228 | + | CDS |
| 109. | hypothetical protein | 100,120..100,335 | 216 | + | CDS |
| 110. | Protein of unknown function (DUF2829) | 100,391..101,146 | 756 | + | CDS |
| 111. | hypothetical protein | 101,143..101,418 | 276 | + | CDS |
| 112. | hypothetical protein | 101,422..101,727 | 306 | + | CDS |
| 113. | hypothetical protein | 101,745..102,095 | 351 | + | CDS |
| 114. | hypothetical protein | 102,092..102,409 | 318 | + | CDS |
| 115. | hypothetical protein | 102,399..102,569 | 171 | + | CDS |
| 116. | hypothetical protein | 102,590..102,943 | 354 | + | CDS |
| 117. | hypothetical protein | 103,085..103,930 | 846 | + | CDS |
| 118. | Structural protein | 103,830..109,487 | 5658 | + | CDS |
| 119. | hypothetical protein | 109,702..110,319 | 618 | + | CDS |
| 120. | hypothetical protein | 110,324..110,773 | 450 | + | CDS |
| 121. | hypothetical protein | 110,888..111,136 | 249 | - | CDS |
| 122. | hypothetical protein | 111,129..111,617 | 489 | - | CDS |
| 123. | cell adhesive protein | 111,607..111,855 | 249 | - | CDS |
| 124. | hypothetical protein | 111,863..112,054 | 192 | - | CDS |
| 125. | hypothetical protein | 112,051..112,764 | 714 | - | CDS |
| 126. | hypothetical protein | 112,757..113,299 | 543 | - | CDS |
| 127. | DNA (cytosine-5)-methyltransferase | 113,296..114,423 | 1128 | - | CDS |
| 128. | hypothetical protein | 114,428..114,736 | 309 | - | CDS |
| 129. | dATP/dGTP diphosphohydrolase | 114,733..115,290 | 558 | - | CDS |
| 130. | hypothetical protein | 115,335..115,676 | 342 | - | CDS |
| 131. | hypothetical protein | 115,654..115,959 | 306 | - | CDS |
| 132. | hypothetical protein | 115,960..116,316 | 357 | - | CDS |
| 133. | ATP-dependent DNA helicase | 116,313..117,734 | 1422 | - | CDS |

| | | | | | |
|------|--|------------------|------|---|-----|
| 134. | hypothetical protein | 117,724..118,110 | 387 | - | CDS |
| 135. | hypothetical protein | 118,117..118,440 | 324 | - | CDS |
| 136. | hypothetical protein | 118,440..118,610 | 171 | - | CDS |
| 137. | exodeoxyribonuclease | 118,607..119,626 | 1020 | - | CDS |
| 138. | hypothetical protein | 119,623..119,982 | 360 | - | CDS |
| 139. | hypothetical protein | 120,007..120,159 | 153 | - | CDS |
| 140. | flotillin family protein | 120,146..121,846 | 1701 | - | CDS |
| 141. | hypothetical protein | 121,879..122,373 | 495 | - | CDS |
| 142. | acyl carrier protein | 122,363..122,614 | 252 | - | CDS |
| 143. | hypothetical protein | 122,602..123,315 | 714 | - | CDS |
| 144. | hypothetical protein | 123,318..123,515 | 198 | - | CDS |
| 145. | hypothetical protein | 123,531..124,286 | 756 | - | CDS |
| 146. | DNAB-Like Replicative Helicase; ATPase | 124,148..125,272 | 1125 | - | CDS |
| 147. | hypothetical protein | 125,250..125,528 | 279 | - | CDS |
| 148. | zinc-finger-containing domain protein | 125,580..126,146 | 567 | - | CDS |
| 149. | hypothetical protein | 126,113..126,370 | 258 | - | CDS |
| 150. | hypothetical protein | 126,375..126,728 | 354 | - | CDS |
| 151. | DNA primase/helicase | 126,706..127,719 | 1014 | - | CDS |
| 152. | DNA replication factor | 127,742..129,058 | 1317 | - | CDS |
| 153. | hypothetical protein | 129,055..129,231 | 177 | - | CDS |
| 154. | NinG protein | 129,215..129,685 | 471 | - | CDS |
| 155. | hypothetical protein | 129,685..129,936 | 252 | - | CDS |
| 156. | DUF4494 domain-contain protein | 129,929..130,399 | 471 | - | CDS |
| 157. | hypothetical protein | 130,411..130,671 | 261 | - | CDS |
| 158. | hypothetical protein | 130,740..131,408 | 669 | - | CDS |
| 159. | hypothetical protein | 131,405..131,608 | 204 | - | CDS |
| 160. | P63C domain-containing protein | 131,605..131,793 | 189 | - | CDS |
| 161. | hypothetical protein | 131,801..131,953 | 153 | - | CDS |
| 162. | hypothetical protein | 131,999..132,265 | 267 | - | CDS |
| 163. | hypothetical protein | 132,310..132,480 | 171 | - | CDS |
| 164. | hypothetical protein | 132,564..132,815 | 252 | - | CDS |
| 165. | hypothetical protein | 132,833..133,129 | 297 | - | CDS |
| 166. | hypothetical protein | 133,303..133,614 | 312 | - | CDS |
| 167. | hypothetical protein | 133,635..133,886 | 252 | - | CDS |
| 168. | hypothetical protein | 133,911..134,294 | 384 | - | CDS |
| 169. | hypothetical protein | 134,297..134,605 | 309 | - | CDS |
| 170. | AAA ATPase domain protein | 134,617..135,414 | 798 | - | CDS |
| 171. | hypothetical protein | 135,411..135,632 | 222 | - | CDS |
| 172. | DUF3988 domain-containing protein | 135,757..136,593 | 837 | - | CDS |
| 173. | hypothetical protein | 136,605..137,042 | 438 | - | CDS |
| 174. | Poly A polymerase | 137,063..137,725 | 663 | - | CDS |
| 175. | hypothetical protein | 137,744..137,998 | 255 | - | CDS |
| 176. | hypothetical protein | 138,006..138,482 | 477 | - | CDS |
| 177. | hypothetical protein | 138,482..138,706 | 225 | - | CDS |
| 178. | hypothetical protein | 138,777..139,958 | 1182 | - | CDS |
| 179. | hypothetical protein | 139,963..140,703 | 741 | - | CDS |

| | | | | | |
|------|--------------------------------------|------------------|------|---|-----|
| 180. | hypothetical protein | 140,744..141,805 | 1062 | - | CDS |
| 181. | hypothetical protein | 141,818..142,108 | 291 | - | CDS |
| 182. | hypothetical protein | 142,117..143,013 | 897 | - | CDS |
| 183. | hypothetical protein | 143,025..143,279 | 255 | - | CDS |
| 184. | hypothetical protein | 143,270..143,575 | 306 | - | CDS |
| 185. | hypothetical protein | 143,577..143,969 | 393 | - | CDS |
| 186. | hypothetical protein | 144,007..144,357 | 351 | - | CDS |
| 187. | hypothetical protein | 144,354..144,605 | 252 | - | CDS |
| 188. | hypothetical protein | 144,685..145,083 | 399 | - | CDS |
| 189. | Lys_methyl_FliB super family protein | 145,073..145,546 | 474 | - | CDS |
| 190. | hypothetical protein | 145,543..145,815 | 273 | - | CDS |
| 191. | hypothetical protein | 145,812..146,195 | 384 | - | CDS |
| 192. | hypothetical protein | 146,146..146,439 | 294 | - | CDS |
| 193. | hypothetical protein | 146,420..146,704 | 285 | - | CDS |
| 194. | hypothetical protein | 146,732..147,043 | 312 | - | CDS |
| 195. | hypothetical protein | 147,063..147,536 | 474 | - | CDS |
| 196. | hypothetical protein | 147,533..147,787 | 255 | - | CDS |
| 197. | hypothetical protein | 147,907..148,140 | 234 | - | CDS |
| 198. | hypothetical protein | 148,121..148,546 | 426 | - | CDS |
| 199. | hypothetical protein | 148,558..148,716 | 159 | - | CDS |
| 200. | hypothetical protein | 148,722..149,036 | 315 | - | CDS |
| 201. | hypothetical protein | 149,045..149,392 | 348 | - | CDS |
| 202. | hypothetical protein | 149,389..149,793 | 405 | - | CDS |
| 203. | hypothetical protein | 149,942..150,061 | 120 | - | CDS |
| 204. | hypothetical protein | 150,130..150,390 | 261 | - | CDS |
| 205. | hypothetical protein | 150,547..150,669 | 123 | - | CDS |
| 206. | hypothetical protein | 150,800..150,985 | 186 | - | CDS |