## Supplementary table S1. The identified SNVs (SNPs and indels) across the 10 isolates and their coordinates in the Cow1 reference genome.

Annotations covering the SNV and the effect the SNV has on the gene product are also shown
(letters indicate amino acids, $\mathrm{AA}=$ amino acids)
For clarity, SNVs shared by two or more isolates are highlighted and the more than 60 mutations found
only in the hypermutating Cow3Pc have been omitted.

| SNV type | Coord in Cow1 | Cow1 | Cow2 | Cow3Pc | Cow4Pc | Fetus1Pc | Fetus2Pc | Sediment 1 | Sediment 2 | Fetus1Pc-2 | Fetus2Pc-2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SNP | 432,614 | C | C | C | C | C | T | C | C | C | C |
| SNP | 671,082 | T | T | T | T | T | T | T | C | T | T |
| deletion | 1,594,715 | A | A | A | A | A | - | A | A | A | A |
| SNP | 1,773,112 | A | A | A | A | A | A | T | A | A | A |
| SNP | 2,022,492 | C | C | C | C | C | C | C | C | T | C |
| deletion | 2,308,984 | A | A | A | A | A | A | A | A | - | A |
| SNP | 2,309,056 | C | C | C | C | T | C | C | C | C | C |
| deletion | 2,309,285 | A | A | - | A | - | A | A | A | - | A |
| insertion | 2,309,740 | - | - | - | G | - | G | - | - | - | G |
| SNP | 2,363,596 | G | G | G | G | G | G | G | G | T | G |
| SNP | 2,370,360 | A | A | A | A | A | G | A | A | A | A |
| SNP | 2,413,725 | A | G | A | A | A | A | A | A | A | A |
| insertion | 2,758,175 | - | C | C | C | C | C | C | C | C | C |
| deletion | 3,353,320 | T | T | T | - | T | T | T | T | T | T |
| SNP | 3,642,409 | A | A | A | A | A | A | A | A | C | A |
| SNP | 3,705,779 | A | A | A | A | G | A | A | A | G | A |
| SNP | 4,003,275 | G | G | G | G | G | G | T | G | G | G |


| Coord in Cow1 | Annotation | Effect on protein |
| :---: | :---: | :---: |
| 432,614 | DNA-3-methyladenine glycosylase II | $\mathrm{A} \mathrm{-->} \mathrm{~V}$ |
| 671,082 | Ribokinase | silent mutation |
| $1,594,715$ | - | N --> Y |
| $1,773,112$ | Multicopper oxidase family protein | P --> L |
| $2,022,492$ | Isoleucyl-tRNA synthetase 2 |  |
| $2,308,984$ | RNA-polymerase sigma-70 factor (sigP) | Frameshift, creates 91 AA product (product usually 179 AA) |
| $2,309,056$ | RNA-polymerase sigma-70 factor (sigP) | Stop codon, creates 105 AA product (product usually 179 AA) |
| $2,309,285$ | RNA-polymerase sigma-70 factor (rsiP) | Frameshift, creates 12 AA product (product usually 275 AA) |
| $2,309,740$ | RNA-polymerase sigma-70 factor (rsiP) | Frameshift, creates 163 AA product (product usually 275 AA) |
| $2,363,596$ | Acetoacetyl-CoA synthase | W -- > C |
| $2,370,360$ | DNA-binding response regulator | silent mutation |
| $2,413,725$ | Group-specific protein | silent mutation |
| $2,758,175$ | - |  |
| $3,353,320$ | Ribonuclease-triphosphate reductase | Frameshift, creates 100 AA product (product usually 152 AA) |
| $3,642,409$ | Signal recognition particle protein | $\mathrm{D}-\mathrm{G}$ |
| $3,705,779$ | Peptidase U4 sporulation factor SpoIIGA | $\mathrm{I}-->\mathrm{T}$ |
| $4,003,275$ | bifunctional protein folD | $\mathrm{T}-->\mathrm{K}$ |

