

| Homologous proteins in CMNR ¹ microorganisms | | | | Homologous proteins in mammals ² | | | |
|---|---------|--------------|-----------------------|---|---------|--------------|---------------------|
| Organism | Protein | Identity (%) | E-value | Organism | Protein | Identity (%) | E-value |
| <i>C. pseudotuberculosis</i> 1002 | SodC | 100 | 3x10 ⁻¹²² | <i>Ovis aries</i> | Sod | 36% | 3x10 ⁻¹⁵ |
| <i>C. pseudotuberculosis</i> 258 | SodC | 100 | 3x 10 ⁻¹²² | <i>Bos taurus</i> | Sod1 | 34% | 2x10 ⁻¹⁵ |
| <i>C. pseudotuberculosis</i> C231 | SodC | 100 | 3x10 ⁻¹²² | <i>Equus caballus</i> | Sod1 | 32% | 8x10 ⁻¹⁵ |
| <i>C. diphtheriae</i> HC02 | SodC | 68 | 2x10 ⁻⁷⁵ | <i>Mus musculus</i> | Sod1 | 34% | 2x10 ⁻¹⁶ |
| <i>M. tuberculosis</i> SUMu007 | SodC | 43 | 9x10 ⁻²⁸ | <i>Homo sapiens</i> | Sod1 | 34% | 3x10 ⁻¹⁶ |
| <i>N. farcinica</i> IFM 10152 | SodC | 44 | 4x10 ⁻³⁵ | | | | |
| <i>Rhodococcus sp.</i> RHA1 | SodC | 49 | 2x10 ⁻⁴² | | | | |

Additional file 3: NCBI BLASTP searches were performed in UniprotKB database. ¹*Corynebacterium, Mycobacterium, Nocardia, Rhodococcus*; ²*Ovis, Bos, Equus and Mus* genera, *Homo sapiens*.