**Supplementary Table 2 |** Cross-validation of the validation set, novel MSP, MSP of *Aeromonas* spp., and MSPs of closely related bacterial species to *Yersinia ruckeri*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Bacterial isolates lab no.** | **Species** | **Organism****(best matched the novel MSP)** | **Log score value** | **Organism****(best matched the MSPs** **of *Aeromonas* spp.,** ***Serratia* spp., *Hafnia* spp.,*****Edwardsiella* spp.)** | **Log score value**  |
| 1. | *Yersinia ruckeri* 21383-2008 | Atlantic salmon | *Yersinia ruckeri*  | 2.04 | No reliable identification | 1.34 |
| 2. | *Yersinia ruckeri* 23973-2013 | Atlantic salmon | *Yersinia ruckeri*  | 2.22 | No reliable identification | 1.59 |
| 3. | *Yersinia ruckeri* 35090-2009 | Atlantic cod | *Yersinia ruckeri*  | 2.26 | No reliable identification | 1.34 |
| 4. | *Yersinia ruckeri* 13631-2009 | American eel | *Yersinia ruckeri*  | 1.99 | No reliable identification | 1.12 |
| 5. | *Yersinia ruckeri* 14969-2010 | Atlantic salmon | *Yersinia ruckeri*  | 2.55 | No reliable identification | 1.64 |
| 6. | *Yersinia ruckeri* 16319-2009 | Atlantic salmon | *Yersinia ruckeri*  | 2.40 | No reliable identification | 1.41 |
| 7. | *Yersinia ruckeri* 18169-2007 | Atlantic salmon | *Yersinia ruckeri*  | 2.41 | No reliable identification | 1.47 |
| 8. | *Yersinia ruckeri* 18170-2007 | Atlantic salmon | *Yersinia ruckeri*  | 2.34 | No reliable identification | 1.47 |
| 9. | *Yersinia ruckeri* 19077-2011 | Atlantic salmon | *Yersinia ruckeri*  | 2.51 | No reliable identification | 1.61 |
| 10.  | *Yersinia ruckeri* 20231-2006 | Atlantic salmon | *Yersinia ruckeri*  | 2.49 | No reliable identification | 1.49 |
| 11. | *Yersinia ruckeri* 9275-1990 | Atlantic salmon | No reliable identification | 1.68 | No reliable identification | 1.44 |
| 12. | *Yersinia ruckeri* 15945-2008 | Atlantic salmon | *Yersinia ruckeri*  | 2.28 | No reliable identification | 1.42 |
| 13. | *Yersinia ruckeri* 24979-2011 | Atlantic salmon | *Yersinia ruckeri*  | 2.62 | No reliable identification | 1.39 |
| 14. | *Yersinia ruckeri* 25907-2008 | Atlantic salmon | *Yersinia ruckeri*  | 2.47 | No reliable identification | 1.57 |
| 15. | *Yersinia ruckeri* 27447-2011 | Atlantic salmon | *Yersinia ruckeri*  | 2.44 | No reliable identification | 1.46 |
| 16.  | *Yersinia ruckeri* 28714-2006 | Atlantic salmon | *Yersinia ruckeri*  | 2.51 | No reliable identification | 1.51 |
| 17.  | *Yersinia ruckeri* 34698-2009 | Atlantic Cod | *Yersinia ruckeri*  | 2.44 | No reliable identification | 1.39 |
| 18.  | *Yersinia ruckeri* 11395-2010 | Atlantic salmon | *Yersinia ruckeri*  | 2.21 | No reliable identification | 1.41 |
| 19. | *Yersinia ruckeri* 11714-2008 | Atlantic salmon | *Yersinia ruckeri*  | 2.53 | No reliable identification | 1.49 |
| 20. | *Yersinia ruckeri* 31718-2009 | Atlantic salmon | *Yersinia ruckeri*  | 2.44 | No reliable identification | 1.66 |
| 21.  | *Yersinia ruckeri* 1463-2013 | Atlantic salmon | *Yersinia ruckeri*  | 2.21 | No reliable identification | 1.42 |
| 22.  | *Yersinia ruckeri* 16155-2003 | Atlantic salmon | *Yersinia ruckeri*  | 2.14 | No reliable identification | 1.46 |
| 23.  | *Yersinia ruckeri* 16743-2009 | Atlantic salmon | *Yersinia ruckeri*  | 2.55 | No reliable identification | 1.57 |
| 24.  | *Yersinia ruckeri* 18047-2008 | Atlantic salmon | *Yersinia ruckeri*  | 2.49 | No reliable identification | 1.45 |
| 25. | *Yersinia ruckeri* 19179-2012 | Atlantic salmon | *Yersinia ruckeri*  | 2.45 | No reliable identification | 1.42 |
| 26. | *Yersinia ruckeri* 19630-2004 | Atlantic salmon | *Yersinia ruckeri*  | 2.39 | No reliable identification | 1.51 |
| 27.  | *Yersinia ruckeri* 25932-2006 | Atlantic salmon | *Yersinia ruckeri*  | 2.41 | No reliable identification | 1.47  |
| 28.  | *Yersinia ruckeri* 27451-2011 | Atlantic salmon | *Yersinia ruckeri*  | 2.50 | No reliable identification | 1.52 |
| 29.  | *Yersinia ruckeri* 29112-2021 | Atlantic salmon | *Yersinia ruckeri*  | 1.98 | No reliable identification | 1.64  |