

**Table S1.** *Aeromonas* spp. strains screened in host range assay

| No | Species name                       | CEMTC No    | Growth temperature, °C | Isolation source   |
|----|------------------------------------|-------------|------------------------|--|
| 1  | <i>A. allosaccharophila</i>        | 2090        | 30                     | river, Dalat, Vietnam  |
| 2  | <i>A. caviae</i>                   | 2395        | 37                     | open sewer drains, Phuket, Thailand                                    |
| 3  | <i>A. hydrophila</i>               | 2089        | 30                     | river, Dalat, Vietnam  |
| 4  | <i>A. hydrophila</i>               | 2094        | 30                     | river, Dalat, Vietnam  |
| 5  | <i>A. jandaei</i>                  | 1354        | 30                     | lake Bolshoe Yarovoe, Altay region, Russia                             |
| 6  | <i>A. jandaei</i>                  | 1458        | 37                     | the Dudhsagar Waterfall, Goa, India                                    |
| 7  | <i>A. media</i>                    | 4531        | 25                     | pond, Novosibirsk, Russia  |
| 8  | <i>A. popoffii</i>                 | 1430        | 30                     | river Geysernaya, Death Valley, Kamchatka peninsula, Russia            |
| 9  | <i>A. popoffii</i>                 | 3381        | 22                     | lake Geysernoe , Ulagan district, Altai republic, Russia               |
| 10 | <i>A. popoffii*</i>                | <b>4062</b> | 28                     | river Inya, Novosibirsk region, Russia                                 |
| 11 | <i>A. salmonicida</i>              | 1370        | 30                     | lake Bolshoe Yarovoe, Altay region, Russia                             |
| 12 | <i>A. salmonicida</i>              | 3364        | 30                     | lake Geysernoe, Altai republic, Russia                                 |
| 13 | <i>A. salmonicida</i>              | 3375        | 30                     | lake Geysernoe, Altai republic, Russia                                 |
| 14 | <i>A. salmonicida</i>              | 3383        | 22                     | lake Geysernoe, Altai republic, Russia                                 |
| 15 | <i>A. salmonicida</i>              | 4051        | 25                     | stream at the foot of the Kizimen volcano, Kamchatka peninsula, Russia |
| 16 | <i>A. salmonicida</i>              | 4537        | 25                     | lake at the settlement Koinikha, Novosibirsk region, Russia            |
| 17 | <i>A. salmonicida</i>              | 4546        | 25                     | mineral spring, Sakhalin island, Russia                                |
| 18 | <i>A. salmonicida/A. piscicola</i> | 4331        | 25                     | lake Uryupino, Novosibirsk region, Russia                              |
| 19 | <i>A. sanarellii</i>               | 2912        | 37                     | cat dermatitis, veterinary clinics, Novosibirsk, Russia                |
| 20 | <i>A. sobria</i>                   | 4573        | 25                     | lake Malinovskoye, Novosibirsk region, Russia                          |
| 21 | <i>Aeromonas</i> sp.               | 4529        | 25                     | pond, Novosibirsk, Russia  |
| 22 | <i>A. taiwanensis/A. dhakensis</i> | 1617        | 30                     | Gulf of Thailand, Pattaya, Thailand                                    |
| 23 | <i>A. veronii</i>                  | 1362        | 30                     | lake Bolshoe Yarovoe, Altay region, Russia                             |
| 24 | <i>A. veronii</i>                  | 1369        | 30                     | lake Bolshoe Yarovoe, Altay region, Russia                             |
| 25 | <i>A. veronii</i>                  | 1414        | 30                     | thermal spring, Uzon Caldera, Kamchatka peninsula, Russia              |
| 26 | <i>A. veronii</i>                  | 1416        | 30                     | thermal spring, Uzon Caldera, Kamchatka peninsula, Russia              |
| 27 | <i>A. veronii</i>                  | 4064        | 28                     | river Inya, Novosibirsk region, Russia                                 |

\*Host strain is marked with bold