Supplementary Table 1. Reference strains of *Avibacterium paragallinarum* used in the current study

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Strain | Serovar (Page/Kume) | Country | NAD requirementa | NCBI accession number(*16S rRNA*/*hagA* gene) | Reference |
| 221 | A/A-1 | Japan | + | AF491826 | Kume *et al*., (1983); Blackall *et* *al.*, (1990); Hobb *et al.*, (2002) |
| 0083 | A/A-1 | USA | + | AY498867/AF491820 | Kume *et al*., (1983); Blackall *et* *al.*, (1990) |
| 2403 | A/A-2 | Germany | + | AF491817 | Kume *et al*., (1983); Blackall *et* *al.*, (1990) |
| E-3C |  A/A-3 | Brazil | + | AF491825 | Kume *et al*., (1983); Blackall *et al.*, (1990) |
| HP14 | A/A-4 | Australia | + | AF491821 | Blackall *et al.*, (1990) |
| 0222 | B/B-1 | USA | + | AY498869 | Blackall et *al.*, (1990); Hobb *et al.*, (2002) |
| 2671 | B/B-1 | Germany | + | AF491822 | Kume *et al*., (1983); Blackall *et* *al.*, (1990) |
| H-18 | C/C-1 | Japan | + | KC951275 | Kume *et al*., (1983); Blackall *et* *al.*, (1990) |
| Modesto | C/C-2 | USA | + | AY498870/ AF491827 | Kume *et al*., (1983); Blackall *et* *al.*, (1990) |
| SA-3 | C/C-3 | South Africa | + | AF491824 | Kume *et al*., (1983); Blackall *et* *al.*, (1990) |
| HP60 | C/C-4 | Australia | + | KC951276/AF491818 | Blackall *et* *al.*, (1990) |
| NCTC 11296T | A/A-2 | Germany | + | AY498868 | Morales-Erasto *et al.*, (2014) |
| HP107 | C | Australia | ++ | GU951544 | Blackall *et al*., (2011) |
| SA7177 | NTb | South Africa | - | AY498871 | Blackall *et al*., (2005) |
| HP105 | A | Australia | ++ | GU951543 | Blackall *et al* ., (2011) |
| ESV-129, ESV 246, ESV 249 | C/C-1 | Mexico | + | KC951265, KC951273, KC951274/KF280256, KF280247 | Morales-Erasto *et al*., (2011); Garcia-Sanchez *et al* ., (2014) |
| Farper-63 | C/C-2 | Peru | - | KP128015 | Falconi-Agapito *et al* ., (2015) |
| Lavetec 03, Lavetec 27, Lavetec 55 | C/C-1 | Ecuador | + | KF280242,KF280244/KF280259, KF280261 | Garcia-Sanchez *et al.*, (2014) |
| SCBY-1 | NAc | Tibet | NA | GU737687 | NA |
| NA | NA | China | NA | DQ399308 | NA |
| VRDC/Avpg1/WZ | NA | India | NA | KJ621071 | NA |
| VRDC/AvpaCA/SZ | NA | India | NA | KJ621077 | NA |
| sd-1 | NA | China | NA | AY388647 | NA |
| Dalian | NA | China | NA | AY622378 | NA |
| NA | NA | China | NA | AY876921 | NA |

a NAD, nicotinamide adenine dinucleotide; +, requirement; –, no requirement; ++,required nurse colony for growth, even on TM/SN agar.

b NT, not-typed.

c NA, not available.