**Table S5.** Comparison of the *Amoebophilus asiaticus* AFP-like gene cluster (as query) with the *Cardinium hertigii* AFP-like gene cluster and the *Serratia entomophila* AFP on the pADAP plasmid by blast.

|  |  |  |  |
| --- | --- | --- | --- |
| ***Amoebophilus* AFP-likeprotein** | ***Cardinium* (locus\_tag, aa identities to *Amoebophilus* AFP-like, E-value, PFAM domain)** | ***Serratia* (AFP\_tag, aa identities to AFP, E-value, PFAM domain)** | **putative function** |
| Aasi\_0232 | CAHE\_0409 , I=65%, E=1E-236, AAA (PF00004), *Peptidase\_M41* (PF01434) | Afp15, I=26%, E= 5e-16, *AAA* (PF00004) | ATPase |
| Aasi\_0557 | CAHE\_0037**,** I=42%, E=1e-283, *Baseplate\_J* (PF04865) | Afp11, I=24%/35%, E=1e-15/2e-8, - | phage baseplate |
| Aasi\_0556 | CAHE\_0036, I=64%, E=3e-96, - | \*Afp13, I=31%, E=0.8, *Adeno\_shaft* (PF00608) | virus fibre protein |
| Aasi\_1072 | CAHE\_0456, I=37%, E=9e-30, - | \*Afp16, I=9%, E=0.069, - | n.d. |
| Aasi\_1073 | CAHE\_0457, I=35%, E=5e-41, - | - | n.d. |
| Aasi\_1074 | CAHE\_0458, I=76%, E=4e-228, Phage\_sheath\_1 (PF04984) | Afp3, I=49%, E=7e-42, Phage\_sheath\_1 (PF04984)  Afp2, I=48%, E=3e-41, Phage\_sheath\_1 (PF04984)  Afp4, I=26%, E=3e-31, | phage tail sheath |
| Aasi\_1075 | CAHE\_0459, I=29%, E=3e-20, - | - | n.d. |
| Aasi\_1076 | CAHE\_0460, I=30%, E=1e-10, - | - | n.d. |
| Aasi\_1077 | CAHE\_0461, I=41%, E=1e-26, *Phage\_T4\_gp19* (PF06841) | Afp1, I=23%, E=9.9, *Phage\_T4\_gp19* (PF06841)  Afp5, I=22%, E=3e-21, *Phage\_T4\_gp19* (PF06841) | phage tail tube |
| Aasi\_1078 | CAHE\_0462, I=48%, E=0.011, - | - | n.d. |
| Aasi\_1079 | CAHE\_0463, I=35%, E=2e-36, - | Afp7, I=27%, E=3e-09, - | n.d. |
| Aasi\_1080 | CAHE\_0763, I=45%, E=3e-153, Phage\_GPD (PF05954)/Phage\_base\_V (PF04717) | Afp8, I=22%, E=2e-26, Phage\_GPD (PF05954)/Phage\_base\_V (PF04717) | VgrG |
| Aasi\_1081 | CAHE\_0762, I=64%, E=9e-39, PAAR\_motif (PF05488) | - | n.d. |
| Aasi\_1082 | CAHE\_0761, I=48%, E=1e-32, GPW\_gp25 (PF04965) | \*Afp9, I=29%, E=5e-29, GPW\_gp25 (PF04965) | lysozyme |
| Aasi\_1083 | CAHE\_0760, I=44%, E=5e-202, - | Afp12, I=22%, E=2e-15, - | n.d. |
| Aasi\_1806 | CAHE\_0118, I=24%/25%, E=3e-67/8e-35, - | Afp14, I=15%/12%, E=8e-30/1, - | n.d. |