**Table S4 Summary of the total of non-single-copy homologue groups.**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No.** | **Category** | **DpTV-1a** | **DjTV-2a** | **HvAV-3e** | **HvAV-3f** | **HvAV-3g** | **HvAV-3h** | **HvAV-3i** | **HvAV-3j** | **SfAV-1a** | **TnAV-6a** | **TnAV-6b** | **Annotation** |
| **1** | **A** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **2** | **1** | **Major capsid protein (HvAV-3h ORF53)** |
| **2** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **2** | **1** | **1** | **RNaseIII (HvAV-3h ORF24)** |
| **3** | **2** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **HvAV-3h ORF46a/DjTV-2a ORF125** |
| **4** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **2** | **1** | **1** | **HvAV-3h ORF48** |
| **5** | **1** | **2** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **2** | **1** | **Myristylated membrane protein-like protein (HvAV-3h ORF62)** |
| **6** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **2** | **1** | **Serine/threonine protein kinase (HvAV-3h ORF75)** |
| **7** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **2** | **1** | **1** | **Serine/threonine protein kinase (HvAV-3h ORF124)** |
| **8** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **2** | **1** | **1** | **ATPase (HvAV-3h ORF125)** |
| **9** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **2** | **1** | **RNA polymerase subunit (HvAV-3h ORF143)** |
| **10** | **0** | **0** | **1** | **1** | **1** | **1** | **1** | **1** | **2** | **1** | **1** | **HvAV-3h ORF23** |
| **11** | **0** | **0** | **1** | **1** | **1** | **1** | **1** | **1** | **2** | **0** | **0** | **Putative nucleic acid-binding protein (HvAV-3h ORF59)** |
| **12** | **0** | **0** | **0** | **2** | **1** | **1** | **1** | **1** | **0** | **1** | **1** | **HvAV-3h ORF98** |
| **13** | **0** | **0** | **1** | **1** | **1** | **1** | **1** | **1** | **2** | **1** | **1** | **HvAV-3h ORF122** |
| **14** | **0** | **0** | **1** | **1** | **2** | **1** | **1** | **1** | **1** | **0** | **0** | **HvAV-3h ORF132** |
| **15** | **2** | **0** | **0** | **1** | **1** | **0** | **1** | **0** | **0** | **0** | **0** | **ATPase (HvAV-3f ORF88)** |
| **16** | **B** | **3** | **4** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **P64 (HvAV-3h ORF58)** |
| **17** | **0** | **0** | **1** | **2** | **1** | **2** | **2** | **1** | **1** | **1** | **1** | **Putative S1/P1 nuclease (HvAV-3h ORF88/ORF139)** |
| **18** | **0** | **0** | **2** | **2** | **2** | **2** | **2** | **2** | **1** | **1** | **1** | **HvAV-3h ORF31/ORF34** |
| **19** | **0** | **0** | **4** | **0** | **2** | **0** | **1** | **3** | **0** | **0** | **0** | **HvAV-3g ORF10** |
| **20** | **2** | **2** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **1** | **1** | **TnAV-6a ORF71** |
| **21** | **1** | **1** | **5** | **5** | **5** | **5** | **5** | **5** | **4** | **2** | **2** | **IAP-like protein** |
| **22** | **0** | **0** | **7** | **2** | **5** | **0** | **0** | **2** | **2** | **0** | **0** | **HR** |
| **23** | **C** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **2** | **2** | **TnAV-6a ORF27** |
| **24** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **3** | **2** | **TnAV-6a ORF36** |
| **25** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **2** | **2** | **TnAV-6a ORF66** |
| **26** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **2** | **2** | **TnAV-6a ORF70** |
| **27** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **2** | **2** | **TnAV-6a ORF73** |
| **28** | **D** | **2** | **1** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **DjTV-2a ORF134** |
| **29** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **2** | **1** | **TnAV-6b ORF55** |
| **30** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **1** | **2** | **TnAV-6a ORF63** |
| **31** | **E** | **15** | **6** | **23** | **29** | **26** | **24** | **25** | **26** | **7** | **3** | **7** | **BRO** |
| **32** | **2** | **2** | **4** | **5** | **4** | **4** | **3** | **3** | **1** | **6** | **7** | **ARO** |
| **33** | **0** | **0** | **1** | **2** | **3** | **2** | **2** | **3** | **1** | **0** | **0** | **Virokine (HvAV-3h ORF95/ORF102)** |
| **34** | **0** | **5** | **2** | **1** | **2** | **2** | **2** | **2** | **1** | **0** | **0** | **RING-finger-containing E3 ubiquitin ligase (HvAV-3h ORF167/ORF175)** |