**Table S6. Alternative start codon usage and internal ORFs in KSHV**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Gene** | **Start** | **End** | **Codon** | **Type** | **Prediction** | **Nuc.** | **Aminoacids** |
| ORF70 | 21051 | 20038 | ATG | ORF | P | 1013 | 337 |
| ORF70A | 21099 | 20038 | ATG | Alternative start | P | 1061 | 353 |
| ORFK6\_vMIP-I | 27374 | 27087 | ATG | ORF | P | 287 | 95 |
| ORFK6A  | 27443 | 27087 | CTG | Alternative start | P | 356 | 118 |
| ORFK6B | 27422 | 27087 | ATA | Alternative start | M | 335 | 111 |
| ORF54  | 77483 | 78439 | ATG | ORF | M | 956 | 318 |
| ORF54A  | 77552 | 78439 | ATG | Alternative start | M | 887 | 295 |
| ORF62  | 101013 | 100018 | ATG | ORF | P | 995 | 331 |
| ORF62B | 101019 | 100018 | GTG | Alternative start | M | 1001 | 333 |
| ORF62A  | 101061 | 100018 | TTG | Alternative start | P | 1043 | 347 |
| Kaposin B | 119121 | 117913 | CTG | ORF | P | 1208 | 402 |
| Kaposin C1 | 119075 | 117738 | CTG | ORF | P | 1337 | 445 |
| Kaposin C2 | 119084 | 117738 | CTG | Alternative start | P | 1346 | 448 |
| ORF10 | 14500 | 15756 | ATG | ORF | M | 1256 | 418 |
| ORF10.2 | 15574 | 15756 | ATG | internal ORF | P | 182 | 60 |
| ORF11 | 15771 | 16994 | ATG | ORF | P | 1223 | 407 |
| ORF11.5  | 15926 | 15991 | ATG | internal ORF | P | 65 | 21 |
| ORFK3 | 19557 | 18589 | ATG | ORF | P | 968 | 322 |
| ORFK3A | 19128 | 18589 | ATG | internal ORF | P | 539 | 179 |
| ORF20  | 35391 | 34429 | ATG | ORF | M | 962 | 320 |
| ORF20A | 35322 | 34429 | CTG | internal ORF | M | 893 | 297 |
| ORF20B | 35202 | 34429 | ATG | internal ORF | P | 773 | 257 |
| k8.1 long  | 75732 | 76511 | ATG | ORF | P | 779 | 259 |
| k8.1 short  | 75890 | 76511 | ATG | internal ORF | P | 622 | 206 |

Five viral ORFs (ORF70, K6, ORF54, ORF62 and Kaposin) have multiple in frame initiation codons. The size of the resulting protein products is indicated in the column labeled aminoacids. Five viral ORFs (ORF10, ORF11, K3, ORF20 and K8.1) contain internal initiation codons in or out of frame with the primary ORF. The size of the product of the internal ORF is indicated in the column labeled aminoacids (M: Manual annotation, P: Predicted in silico)