**Supplementary figure 1.** Construction of transfer DNA containing BV TK. DNA containing 50 nucleotides of the 3'end of cytomegalovirus (CMV) promoter, the full length hBVTK gene and its poly A tail, and a 40-nucleotide sequence of UL51 flanked by *BamHI* restriction sites was amplified from pEP-KanS hBVTK by PCR (DNA fragment). The DNA fragment was inserted into the vector pAmp-9mScarlet-I DNA to obtain pAmp-9mScarlet-1 hBVTK. DNA containing 50 nucleotides of the 3'-end of the CMV promoter, a *I-Sce*I site, an ampicillin resistance cassette, the mScarlet-I gene, 50 nucleotides of the 3'-end of CMV promoter, hBVTK gene and its poly(A) region, and 50 nucleotides of the HSV-1 UL51 gene was was amplified from pAmp-9mScarlet-1 hBVTK (Transfer DNA).

