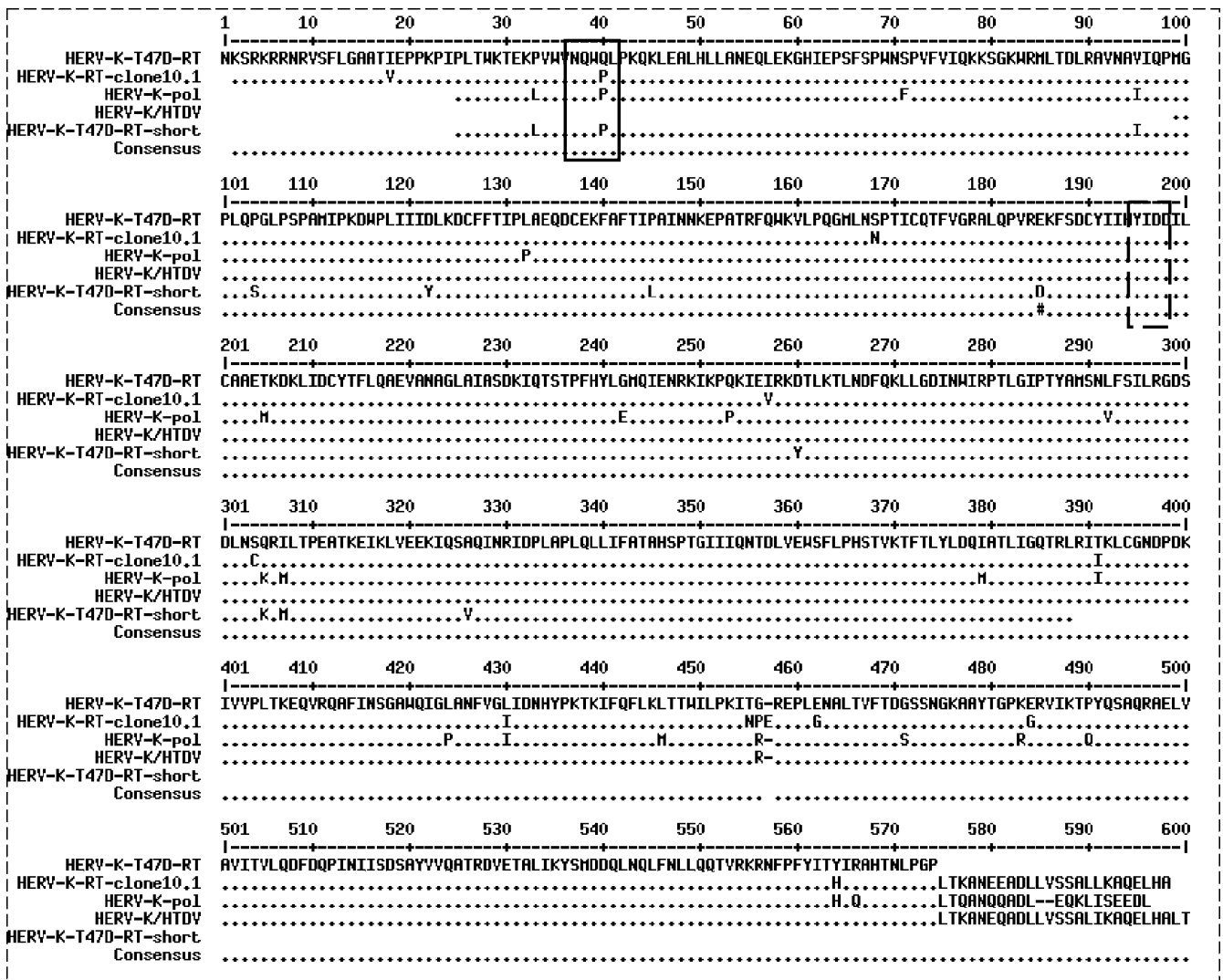


A



B

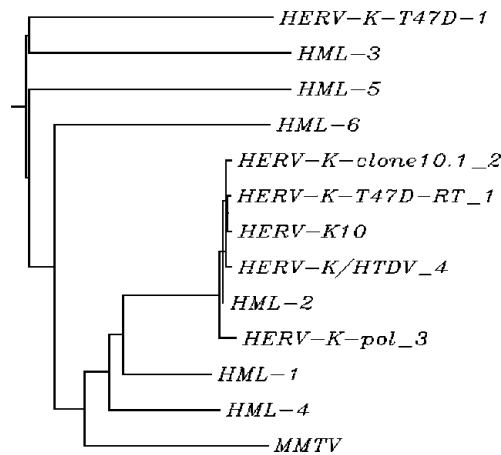


Figure W1. HERV-K-T47D-RT sequence alignment and phylogenetic analysis. (A) Alignment of the HERV-K-T47D-RT protein expected sequence to known HERV-K-RT sequences: 1) The full ORF of the HERV-K-T47D-RT sequence that was isolated by us; 2) The HERV-K-RT (clone 10.1) sequence isolated from bone marrow cell line [20]; 3) The *pol* sequence isolated from particles secreted from T47D cells [18]; 4) The HERV-K-RT/HTDV sequence isolated from teratocarcinoma [27]; 5) The HERV-K-T47D-RT short sequence (1.4 kb) isolated by us. A residue that is highly conserved represented by a dot in the consensus line, the others are in lower case and the symbols "I" and "#" represent similar amino acids (Multalin Software). The siRNA primers area is marked in the black box, and the conserved YIDD motif that was mutated is marked in the box with the broken line. (B) Phylogenetic analysis of the HERV-K-T47D-RT sequence. The HERV-K-T47D-RT was compared with the *pol* region of known HERV-Ks and MMTV sequences: STPLU4 (HML-1), N8.4 (HML-2), P1.3 (HML-3), M3.10 (HML-4), (HML-5), (HML-6), HERV-K-T47D1 [19], HERV-K10 [47], HERV-RT (clone 10.1) [20], HERV-K/HTDV [39], and MMTV. The numbers represent the numbers as the alignment in panel (A).

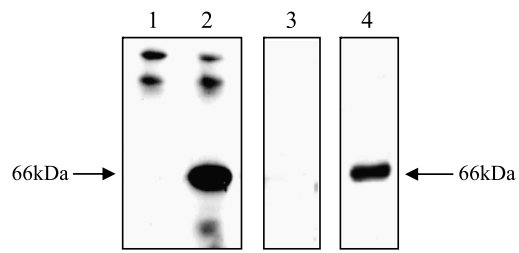


Figure W2. Examination of the polyclonal antibody generated against the short recombinant HERV-K-T47D-RT. Western blot analysis of blot containing lysates of *E. coli* BL21(pLysS) transformed with pT5-HERV-K/HTDV-RT uninduced (1) or induced with 1 mM IPTG (2) and purified MMTV-RT antigen (66 kDa) (3). The blots were incubated with the anti-T47D-RT antibody (lanes 1–3). Identical blot with purified MMTV-RT antigen was incubated with the anti-6His-MMTV-RT antibody as control (lane 4).