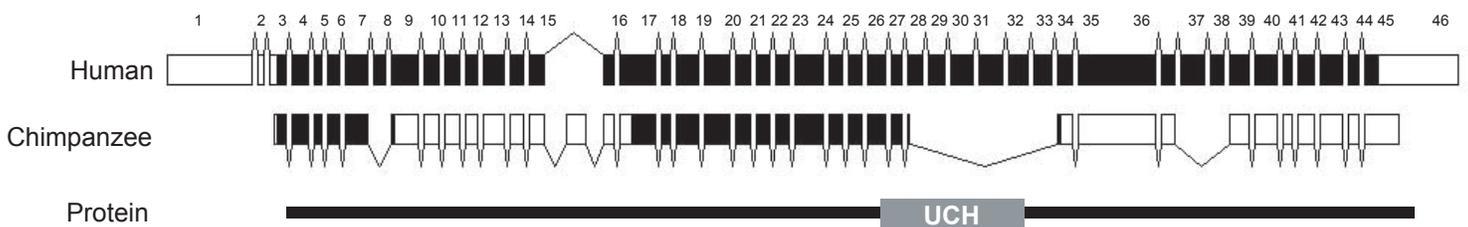


Supplementary Figure 7

USP9Y mRNA



Supplementary Figure 7 Comparison of *USP9Y* gene structures in human and chimpanzee. Exons are depicted as boxes and are numbered. Major open reading frames are shown in black. The predicted protein structure with the position of the ubiquitin carboxyl-terminal domain is shown below.

Comparison of the sequence of the *USP9Y* cDNA obtained by RT-PCR from chimpanzee tissue samples to the human mRNA sequence revealed that the chimpanzee mRNA is missing exons 8, 29-34, 38, and 39. It also contains an additional exon derived from sequence that is intronic in human *USP9Y* between exons 15 and 16. We identified three splice-site mutations in the genomic sequence: a 4 bp deletion at the donor site of exon 8 and two GT → AT substitutions at the donor sites of exons 34 and 39. These mutations could account for the non-inclusion of exons 8, 29-34 and 38-39, respectively. Fourteen additional chimpanzee samples were sequenced to confirm that these mutations were not unique to the particular chimpanzee whose genome was sequenced in the present analysis.