

Dot plots were generated using advanced PipMaker [43]. The comparison was performed between human *BHMT2* and *BHMT* gene sequences (in tandem on the genome, and represented on the *x*-axis) and (a) chimpanzee, (b) orangutan (c) macaque, and (d) marmoset (each represented on the *y*-axis). In the first three panels, the diagonal from lower left to the upper right represents collinearity between forward strands of both the genomes. In panel (d) the marmoset sequence appears to be reversed in orientation. Line offsets indicate that an insertion or deletion of a DNA fragment occurred in the evolutionary history of one or both of the lineages. Orangutan *BMHT* intron 5 had LINE2 which is not present in human, chimpanzee and gorilla. Chimpanzee *BHMT2* intron 1 had a deletion compared to human, gorilla and orangutan and this region in human, gorilla and orangutan had MIR, SINE, LINE2 and LTR repeat elements. In panel (a) the line perpendicular to the diagonal signifies that there is an inverted duplication.