**Electronic Supplementary Material 5.** Domain-by-domain phylogenetic analysis of the newly identified Gogo-B\*07 gene. Neighbor-joining trees were constructed from available full-length genomic sequences of MHC-B and -C genes. Shown in the top left corner is the size of the genomic segments (1-5) which were used for the phylogenetic reconstruction. Black, grey and white circles correspond to bootstrap values of  $\geq 95\%$ ,  $\geq 80\%$  or  $\geq 50\%$ , respectively. Black triangles represent compressed MHC-B and -C sequences of human (H), chimpanzee (C), gorilla (G) and orangutan (O) with the total number of sequences given in parentheses. Highlighted in blue are sequences of Gogo-B\*07 alleles. Highlighted in red are sequences of Gogo-B\*03 alleles co-segregating with Gogo-B\*07. Sequences of other gorilla alleles identified in the present study are highlighted in bold. HLA, human; Patr,  $Pan\ troglodytes$ ; Gogo,  $Gorilla\ gorilla$ ; Gobe,  $Gorilla\ beringei$ ; Popy,  $Pongo\ pygmaeus$ ; Mamu,  $Macaca\ mulatta$ 

