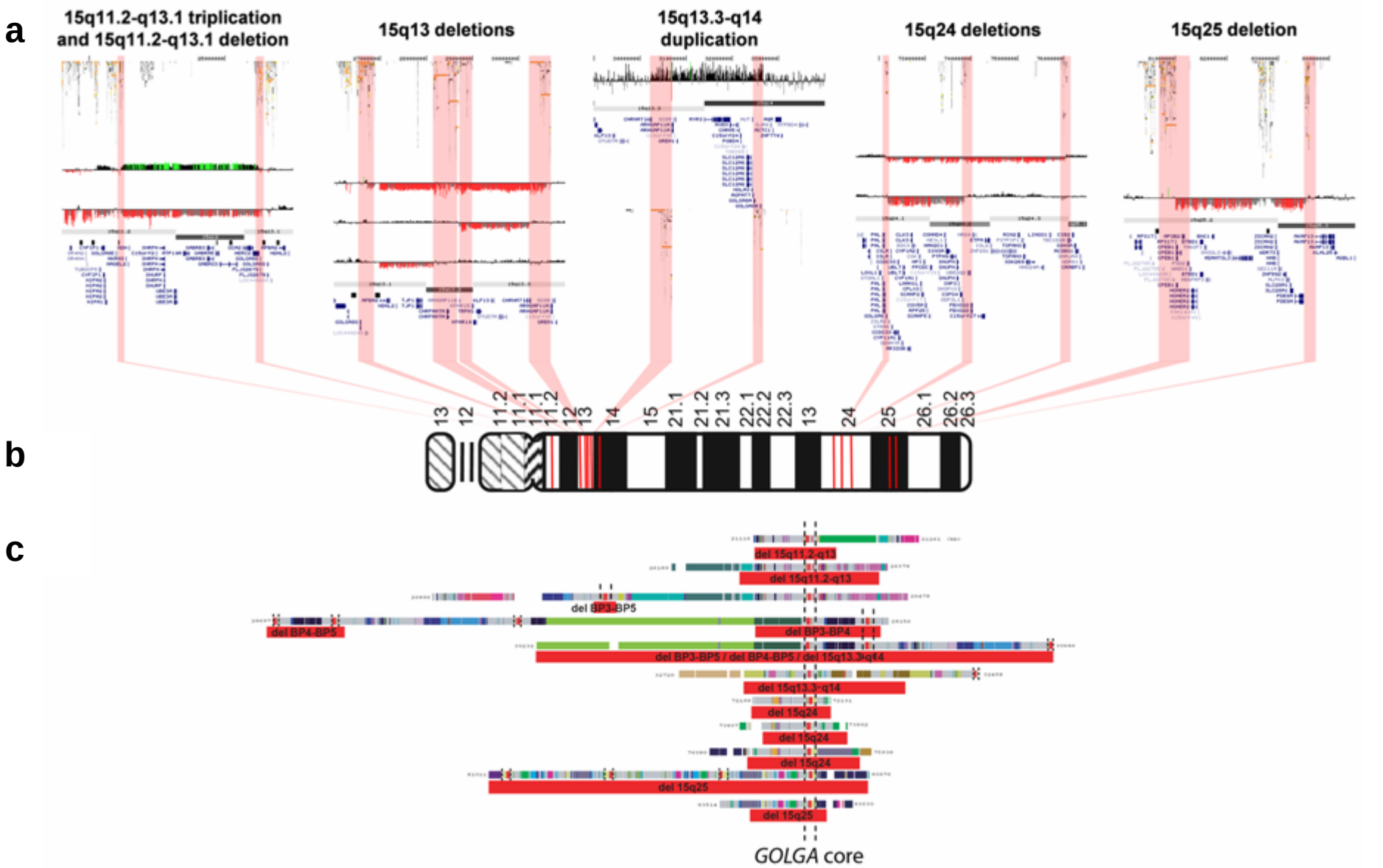

Supplementary Figure 4. Breakpoints of multiple chromosome 15 rearrangements coincide with the location of a duplication family containing the *GOLGA* gene. (**a**) High-resolution oligonucleotide array data from nine different structural rearrangements of chromosome 15 (*left to right*): a triplication of 15q11.2-q13.1 (Sharp *et al.* 2007b); a deletion of 15q11.2-q13.1 associated with Angelman syndrome (Sharp *et al.* 2007b); BP3-BP4-BP5 deletions of 15q13; a duplication of 15q13.3-q14 associated with epilepsy; deletions of 15q24 (Sharp *et al.* 2007a); a deletion of 15q25 associated with congenital diaphragmatic hernia (Mefford *et al.* 2007). In each image, the locations of duplication blocks containing the *GOLGA* gene (Jiang *et al.* 2007) are indicated by red shaded regions. Tracks show segmental duplications, cytogenetic band, assembly gaps, and RefSeq genes. (**b**) *GOLGA*-containing duplications blocks that coincide with the breakpoints of deletion/duplication events are highlighted (*red bars*). (**c**) Diagram showing the localization of rearrangement breakpoints within *GOLGA*-containing duplication blocks. Red bars below each duplication block indicate the interval in which rearrangement breakpoints occur. Although the presence of structural polymorphisms and cross-hybridization between paralogous sequences means we are unable to precisely determine the breakpoints by oligonucleotide array CGH, in every case data showed that the intervals in which the breakpoints occur overlap a *GOLGA* core. The “core element”, which contains the *GOLGA* gene and is shared by all duplication blocks, is highlighted by vertical dash lines. Note that some blocks contain multiple *GOLGA* sequences.