

**b**

Figure 1: Schematic representation of the human CACNA1C gene structure and the genomic region of the CACNA1C-AS1 gene. The top part shows the CACNA1C gene structure with exons 1, 2, and 3, and introns. The bottom part shows the CACNA1C-AS1 gene structure with exons 1, 2, and 3, and introns. The genomic region is divided into three segments: 5' (blue), 3' (red), and a central region (green). The 5' segment contains the CACNA1C-AS1 gene, and the 3' segment contains the CACNA1C gene. The central region contains the CACNA1C gene. The 5' segment is labeled '5' (blue) and '3' (red). The 3' segment is labeled '3' (red). The central region is labeled '5' (blue) and '3' (red). The 5' segment contains the CACNA1C-AS1 gene, and the 3' segment contains the CACNA1C gene. The central region contains the CACNA1C gene. The 5' segment is labeled '5' (blue) and '3' (red). The 3' segment is labeled '3' (red). The central region is labeled '5' (blue) and '3' (red).

**C**

Genomic map of the DS Red gene structure and sequence alignment. The map shows the gene structure with Exon 2, Intron, Intron (branch site), Intron, and Exon 1. The sequence alignment shows the DNA sequence with the DS Red gene structure overlaid. The sequence is color-coded to match the gene structure: Exon 2 is green, Intron is red, Intron (branch site) is blue, Intron is green, and Exon 1 is red. The sequence alignment shows the DNA sequence with the DS Red gene structure overlaid. The sequence is color-coded to match the gene structure: Exon 2 is green, Intron is red, Intron (branch site) is blue, Intron is green, and Exon 1 is red.