



Supplemental Figure 2. Genomic view of the *CCR10* gene. (a) The arrow indicates the direction of transcription of the *CCR10* gene located at Chromosome 17. The adjacent gene, *CNTANP1*, transcribes in an opposite direction. Genomic view of the *CCR10* gene from human, chimp, dog, mouse and rat reveals an evolutionarily conserved region as represented by vertical bars, immediately upstream of the first exon. This conserved region contains a putative direct repeats of two hexameric binding sites (in blue) with three nucleotide spacing, resembling a DR3-type of vitamin D₃ response element (VDRE). The conserved nucleotides are underlined with * . (b) Gel mobility shift assay demonstrates direct interaction of VDR-RXR with the VDRE sequence of the human *CCR10* gene. A standard protocol for gel mobility shift assay was used according to the manufacturer's instruction (Active Motif) using ³²P-labeled human CCR10 VDRE as a probe in the presence of molar excess of old positive and negative competitors. The sequences of the double-stranded oligonucleotide probe for *CCR10* VDRE are: 5'-CTAGCGGGACAGGAAGGAAGGAGGGGGAGAGGGGCCGAGAGG-3' and 5'-CCTCTCGGCCCTCTCCCCGCCTCTTCCTGTCCCGCTAG-3'; the sequences of a positive control VDRE probe are: 5'-AGCTTCAGGTCAAGGAGGTCAGAGAGC-3' and 5'-GCTCTCTGACCTCCTGACCTGAAGCT-3'; the sequences of a negative control, an NF-κB probe, are: 5'-AGTTGAGGGACTTCCCAGGC-3' and 5'-GCCTGGAAAGTCCCCTCAACT-3'. The arrows indicate specific DNA-VDR/RXRα complexes and free DNA probe, respectively.