



**Figure 7 – figure supplement 2.** Topological domain and looping structure indicated by 3D contact domain profile (top) surrounding *RRM2B* gene (chr8:103,250,000-103,800,000) with HiC data from (Rao, Huntley et al. 2014). ChIP-seq data tracks (middle) in HCT116 showing CTCF (motif direction indicated by arrow), RAD21, H3K4me3 and H3K27ac. ChIP-seq of p53 in treated cells (MCF7 and U2OS) is also shown. Candidate regulatory enhancers (used for ChIP-qPCR of Matrin3) are highlighted with an orange box at the tail of an arrow pointing towards the putative target gene. The p53RE is shown, found at the promoter, where stronger ChIP-seq signal was present upon treatments. The 1-dimensional genomic enhancer/promoter distance of 569 KB is indicated (bottom).