



Supplemental Figure 3. Identification and confirmation of *PPP1R21* (exon 9) - *PPP1R21* (intron 9) - *ALK* (exon 20) fusion. Analysis of mRNA expression levels of individual *PPP1R21* and *ALK* exons using RNA-Seq data showed overexpression of *ALK* exons 21 to 29 downstream of the fusion point and also exon 20. Each box represents an exon, and the boxes are colored according to the logarithm of their expression levels as measured in RPKMs (reads per kilobase per million reads). **(B)** RT-PCR (left) and Sanger sequencing (right) confirmation of fusion between exon 9 of *PPP1R21* and exon 20 of *ALK* that also retains a 17-bp fragment of *PPP1R21* intron 9 forming an in-frame fusion. L, 100-bp ladder; T, tumor; N, normal tissue; NC, negative control; ex, exon; in, intron; del, deletion. **(C)** Schematic representation of the predicted chimeric protein containing the dimerization coiled-coil domain (CC) of *PPP1R21* and tyrosine kinase (TK) domain of *ALK*. MAM, merpin, A5 protein and receptor protein tyrosine mu; LB, ligand binding domain; TM, transmembrane domain.