





Supplementary Figure 1: PRMT5 does not methylate RACO-1

(A) In vitro methylation assay with immunoprecipitated myc-tagged PRMT5 and recombinant GST-RACO-1. Enzymatically active PRMT5 methylates GST-GAR (positive control) but not RACO-1. (B) Silencing of PRMT5 does not prevent RACO-1 methylation *in vivo*. 293T cell lines were engineered to stably express shRNA sequences directed towards PRMT5. Cell lines were then transfected with Flag-tagged RACO-1 and labeled with ³[H]-methyl methionine as described in Figure 4D. Incorporation of post-translational methyl groups onto RACO-1 was determined after Flag immunoprecipitation and scintillation counting. shPRMT5 cl. 1:29 and shPRMT5 cl. 2:27 represent two cell lines generated from two independent shRNA sequences.

Supplementary Figure 2: Mutation of RACO-1 methyl acceptor sites does not affect its subcellular distribution

293T cells were transfected with wild type or methyl-mutant RACO-1 constructs (R98K and R109K) and subjected to cytoplasmic and nuclear fractionation. Flag (low) and Flag (high) represent two exposures of the same immunoblot. Immunoblotting for GAPDH and Lamin B validates the purity of subcellular fractionation.