

Supplementary Information

Discovery of Peptidylarginine Deiminase-4 Substrates by Protein Array:
Antagonistic Citrullination and Methylation of Human Ribosomal Protein S2

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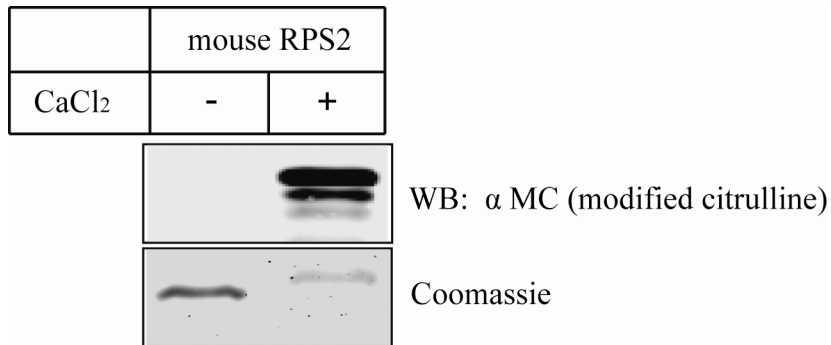


Figure S1. PAD4 citrullinates mouse RPS2 (mRPS2) *in vitro*. Purified mRPS2 was treated by PAD4 with or without 2 mM CaCl₂. Conditions are the same as in Figure 2a.

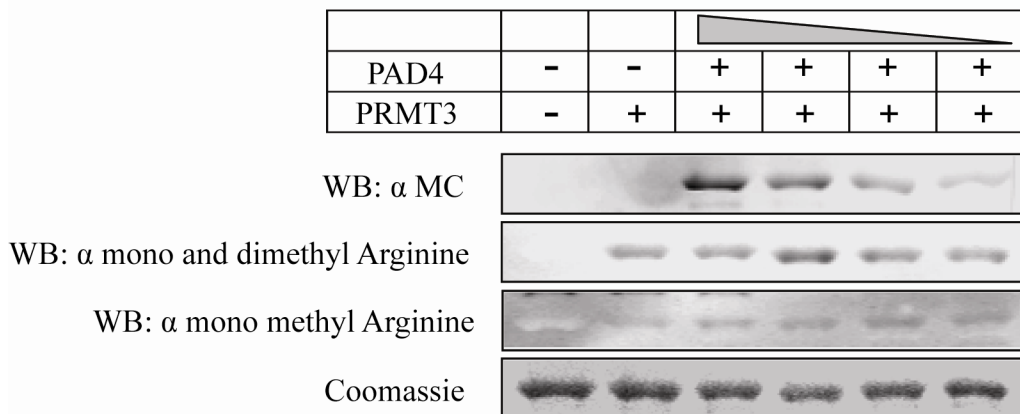


Figure S2. Analysis of methyl content in deiminated RPS2 domains. Purified MBP-GAR was first methylated by PRMT3, followed by the treatment of PAD4. The conditions were the same as that of Figure 4, except for varying PAD4 concentrations (13.75 μg/ml, 2.75 μg/ml, 0.55 μg/ml and 0.11 μg/ml, for lanes 3 to 6, respectively). An antibody specific to monomethyl arginine was used to probe for any monomethyl MBP-GAR (third panel from the top).