Interaction of Myelin Basic Protein with Actin in the Presence of Dodecylphosphocholine Micelles[†]

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[†]Supporting Information

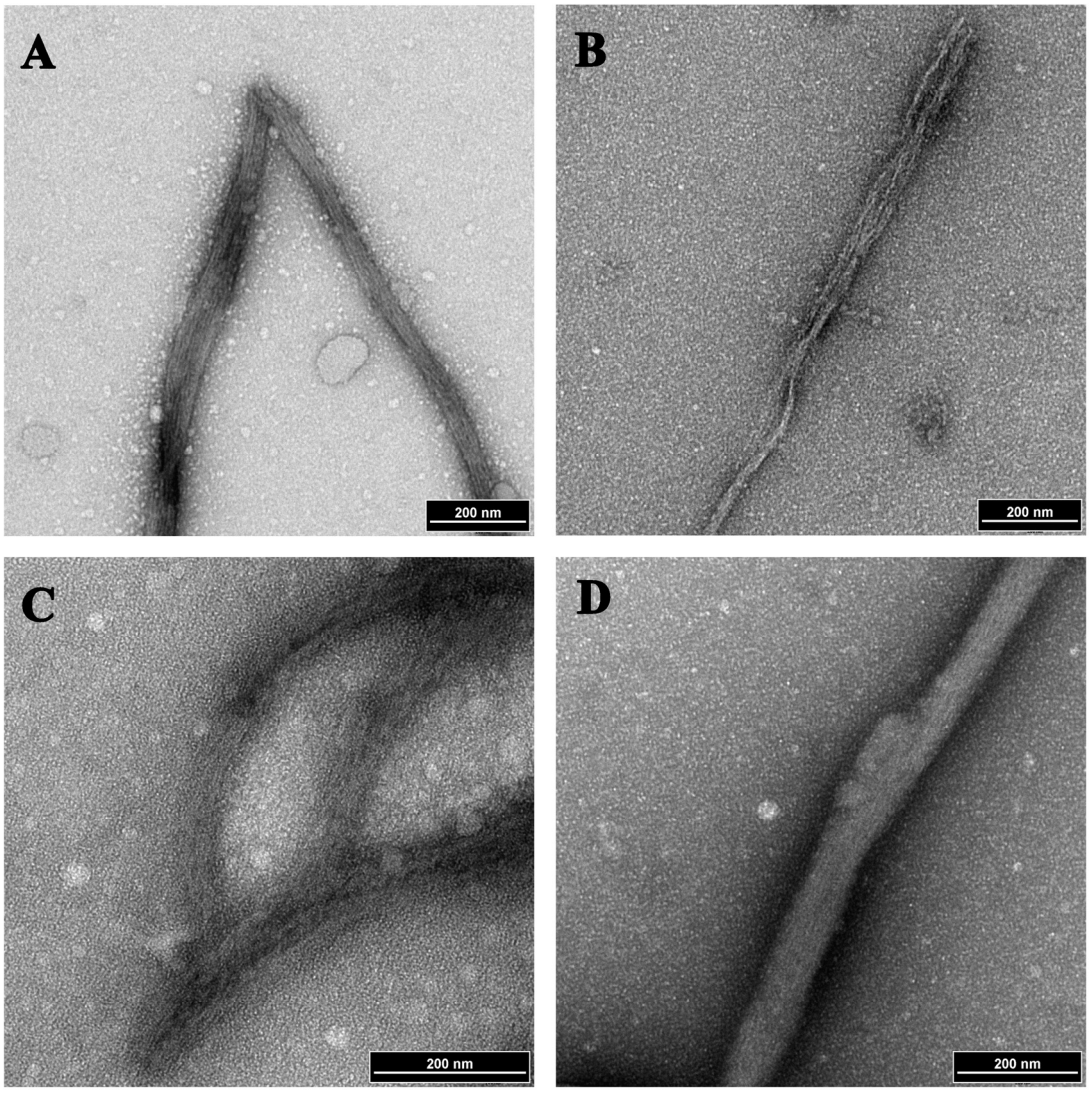

Figure S1: Transmission electron microscopy (TEM) of the assembly of actin induced by different recombinant murine MBP (rmMBP) variants in the presence of 20 mM dodecylphosphocholine (DPC). The rmMBP variants: rmC1 (A), rmC8 (B), rmΔC (C), and rmΔN (D), were added to 5 μM of G-actin at a 4.5 to 1 molar ratio of rmMBP to actin. Following a 1 h incubation at room temperature, samples were stained with uranyl acetate, and the TEM image was captured on a Philips CM10 transmission electron microscope. All scale bars represent 200 nm at the object level.

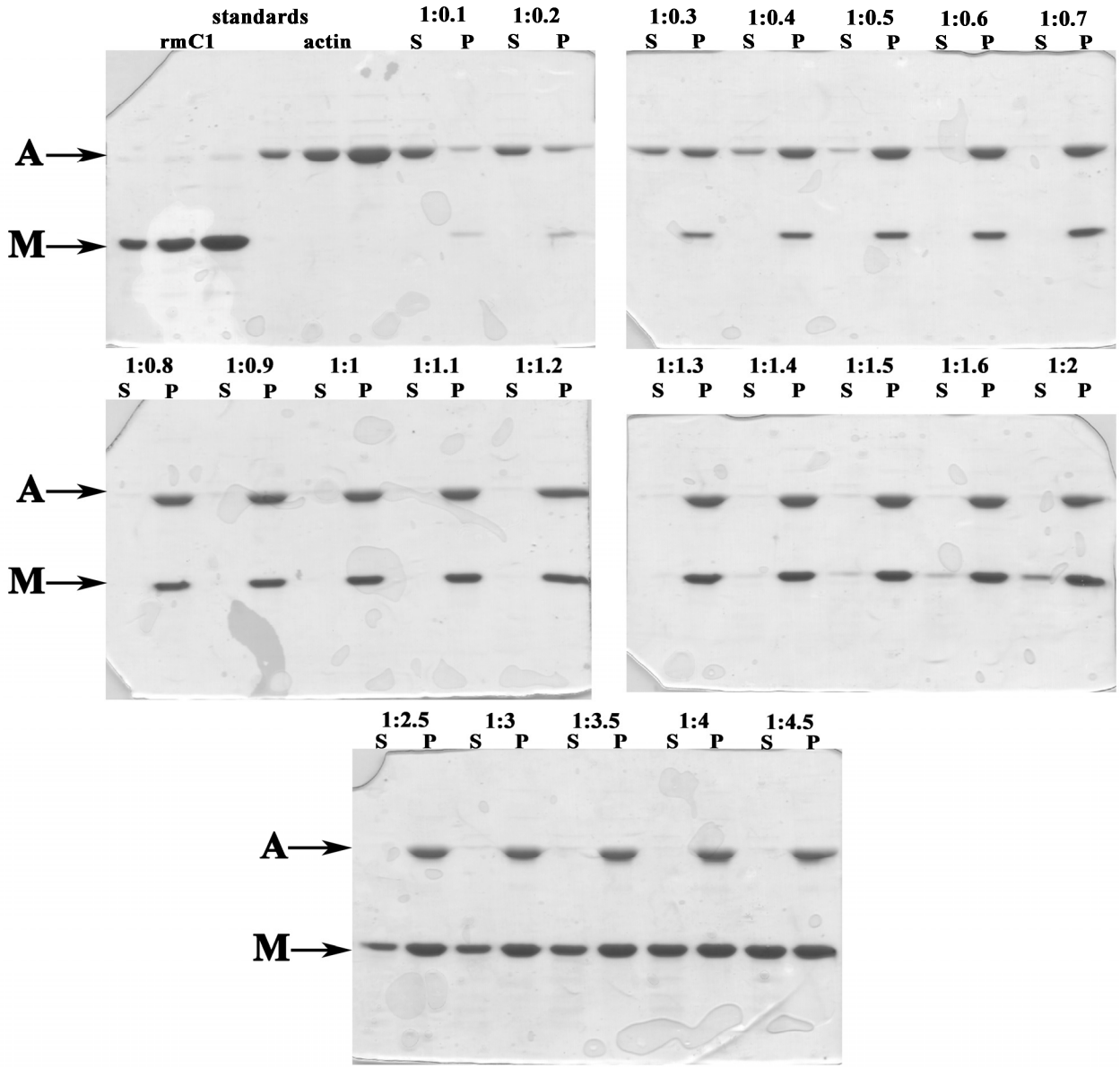

Figure S2: Demonstration of SDS-PAGE-based assessment of actin bundling and binding by rmMBP variants. Shown is a representative binding experiment, where 5 μM of G-actin was mixed with different concentrations of rmC1 in G-buffer to reach the molar ratios indicated above the gels. Reaction mixtures were analyzed as indicated in the Methods section. Following SDS-PAGE, the bands were excised and used for protein quantification. The labels "A" and "M" stand for actin and MBP, respectively; "S" and "P" stand for supernatant and pellet, respectively. As standards we used 2.5, 5, and 10 μg of rmC1 or actin per lane.