

Supporting Information

Zeng et al. 10.1073/pnas.1007416107

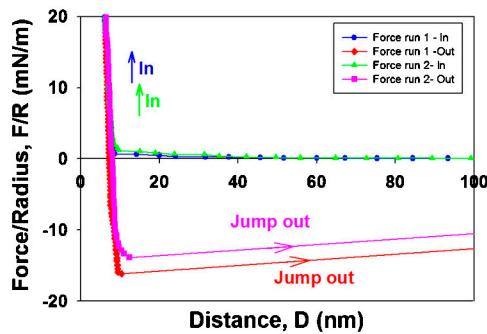


Fig. S1. Bridging adhesion in symmetric mfp-1 films on mica. Spontaneous two force runs after the 100 min contact experiments shown in Fig. 3D.

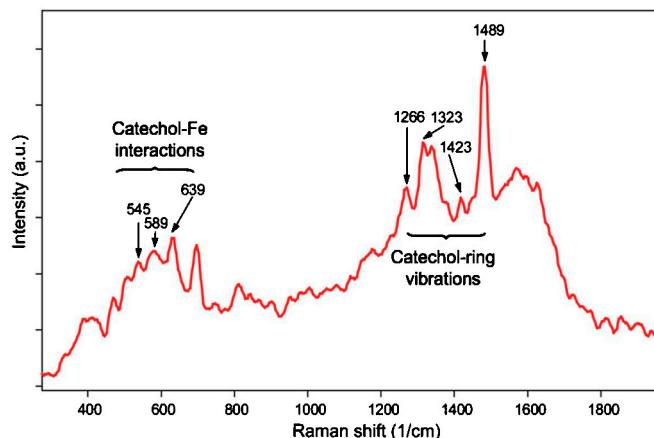


Fig. S2. Resonance Raman spectrum of a mica sandwich of mfp-1 films with 10 μM Fe^{3+} as prepared for surface forces apparatus experiments. Near IR excitation laser wavelength was 532 nm.

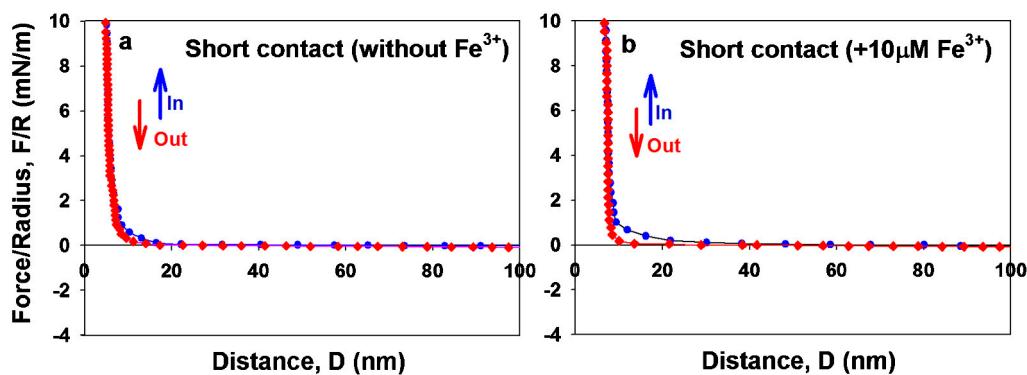


Fig. S3. Bridging adhesion in symmetric films on mica using recombinant mfp-1 without dopa: (A) short contact without Fe^{3+} , and (B) short contact with added 10 μM Fe^{3+} .

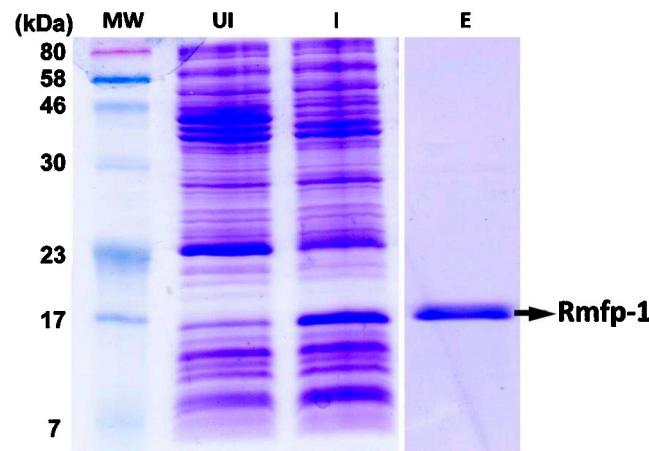


Fig. S4. Expression and purification of recombinant mussel foot protein-1 (rmfp-1). MW, molecular weight marker; UI, uninduced *Escherichia coli* lysate; I, induced *E. coli* cell lysate; E, elusion fraction after C8 purification. (A) Gene sequence of rmfp-1 (**AKPSYPPTYK**)₁₂ **ATGGC**AAACCGAGCTATCCGCACCTATAAAGCAAAGCCGCTTATCCACCGACCTACAAGCGAAACCAAGCTATCCACCAACCTATAAGCGAAACCATTTATCCGCCACCTACAAAGCCAAGCCAAGCTACCCGCCAACATATAAAGCCAAACCGCTTACCCGCCGACATACAAAGCCAACCTTTTACCCACCGACATATAAGGCCAAGCGAGCTACCCACCAACATACAAGGCCAAACCTTCCTATCACCTACGTATAAGCGAAACCGAGCTATCCGCCGACGTACAAAGCGAAGCCGCTTATCCGCCACGTATAAGGCCAAGCCTTCTATCCCAACGTACAAGTAA. (B) Protein sequence of rmfp-1 deduced from the gene sequence of rmfp-1. M **AKPSYPPTYK** **AKPSYPPTYK** **AKPSYPPTYK** **AKPSYPPTYK** **AKPSYPPTYK** **AKPSYPPTYK** **AKPSYPPTYK**