

Correction to “Tough Coating Proteins: Subtle Sequence Variation Modulates Cohesion”

Saurabh Das, Dusty R. Miller, Yair Kaufman, Nadine R. Martinez Rodriguez, Alessia Pallaoro, Matthew J. Harrington, Maryte Gyls, Jacob N. Israelachvili,* and J. Herbert Waite*

Biomacromolecules, 2015, 16 (3), 1002–1008. DOI:10.1021/bm501893y

Figure 3 caption corrected. Corrections highlighted in bold.

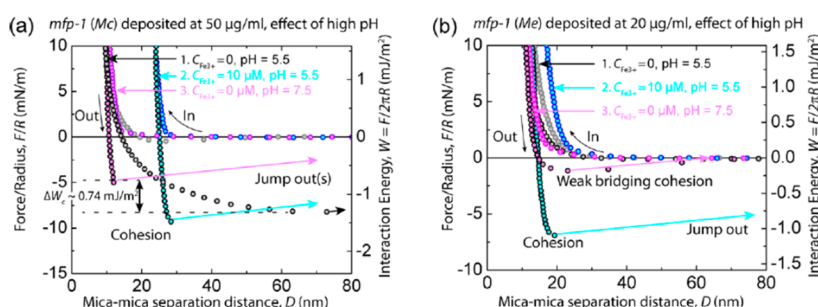


Figure 3. pH dependence of Fe^{3+} -mediated cohesion between two symmetric mfp-1 (*Mc*) films. Representative force vs distance plot showing the interaction between two symmetric mfp-1 (*Mc*) films deposited at 50 $\mu\text{g/mL}$ in 0.1 M sodium acetate buffer, pH 5.5, 0.25 M KNO_3 , and 1 mM bis-tris with $C_{\text{Fe}^{3+}} = 0$ (gray) and 10 μM (blue) at pH 5.5. The cohesion between the mfp-1 (*Mc*) films was preserved after increasing the pH to 7.5 (magenta). (b) Representative force vs distance plot showing the interaction between two symmetric mfp-1 (*Me*) films deposited at 20 $\mu\text{g/mL}$ in 0.1 M sodium acetate buffer, pH 5.5, 0.25 M KNO_3 , and 1 mM bis-tris with $C_{\text{Fe}^{3+}} = 0$ (gray) and 10 μM (blue) at pH 5.5. The surfaces showed a weak bridging cohesion ($W_c < 0.2 \text{ mJ/m}^2$) after increasing the pH to 7.5 (magenta). It should be noted that $C_{\text{Fe}^{3+}}$ is the concentration of ferric cation in the bulk solution between the surfaces. Flushing with buffer at pH 7.5 removes iron from the bulk solution, however, to the extent that the preadsorbed protein films already had some bound Fe^{3+} , the Dopa- Fe^{3+} complexes will be present in them.