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**Adhesive properties of fibrinogen layers probed by force spectroscopy**

Atomic force spectroscopy and single cell force spectroscopy were used to determine the formation of nonadhesive fibrinogen substrates. The formation of fibrinogen bilayer substrate leads to a significant reduction in the adhesion forces between the AFM tip and the substrate as well as between a cell and the substrate. Because fibrinogen is deposited on the surface of thrombi and implanted biomaterials, the mechanical properties of multilayer fibrinogen play important roles in the responses of platelets and leukocytes during thrombus formation and in biomaterial applications.