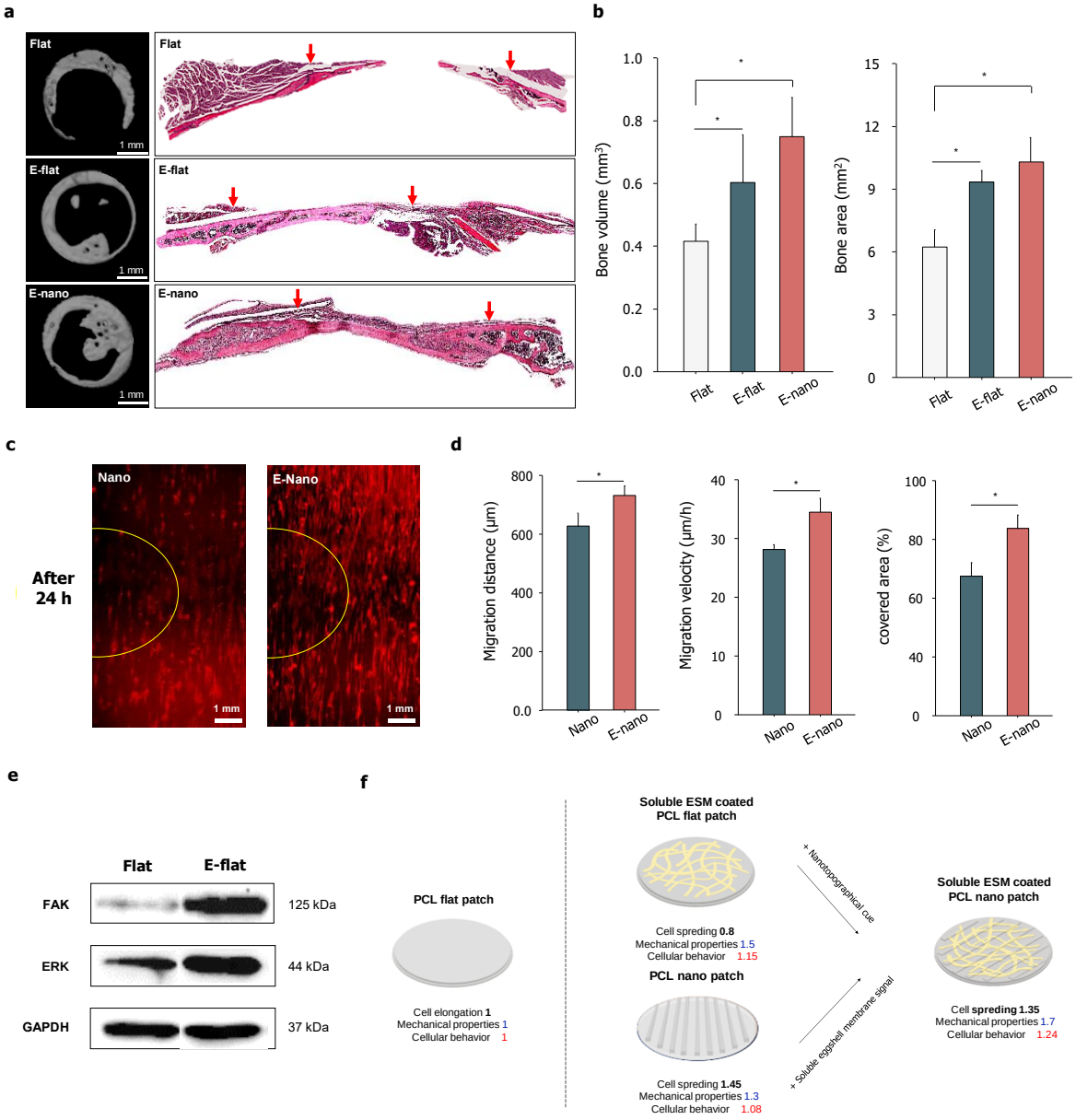

Figure 5. Effect of SEP coating and nanotopographical cues *in vivo*. (a) Representative micro-CT image, hematoxylin and eosin (H&E) staining image, and (b) quantitative analysis of micro-CT of the bone regeneration of SEP-coated flat and nanotopography patches after 3 weeks of repair (n = 5 per sample). (c) *In vitro* cell migration on nanotopographical and SEP-coated nanotopographical patches. (d) Quantification of cell migration distance, velocity, and covered area. (e) Western blot analysis and quantification of the expression levels of FAK and ERK of osteoblasts cultured on the SEP-coated flat topography for 2 days. (f) Schematic model of SEP coating and nanotopographical cue effects. The relative adhesion factor was obtained from the cell spreading ratio, adhesion force, and cell differentiation factor.