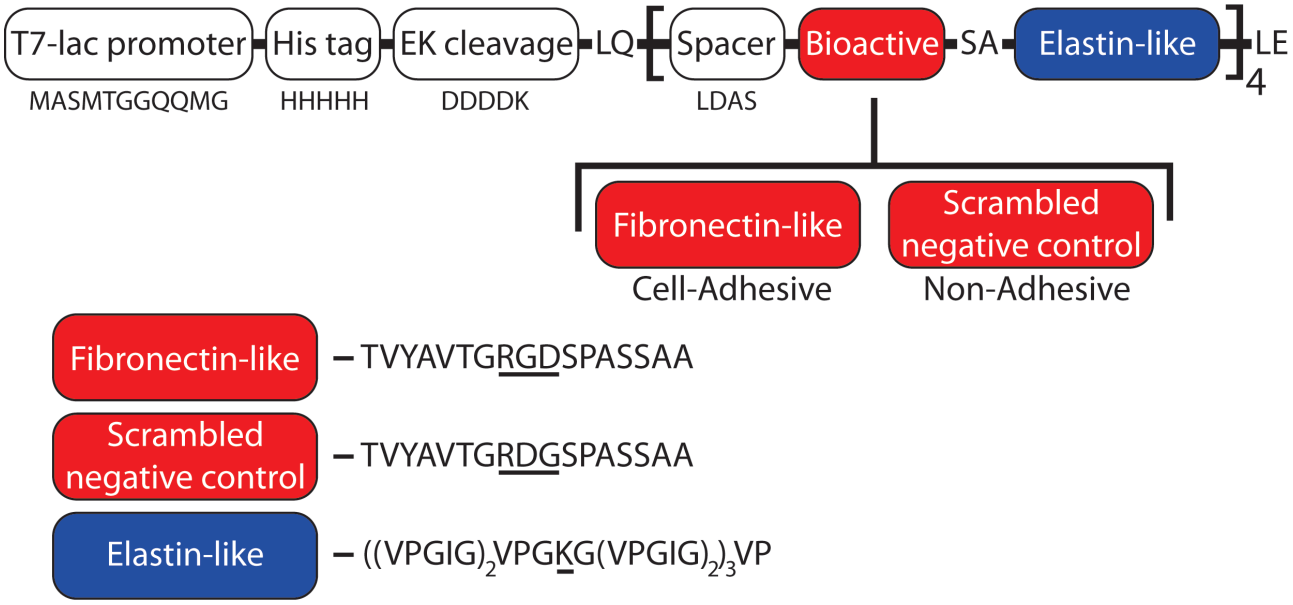

Fig. S1 Amino acid sequence of ELP. The T7-lac promoter site is used to initiate expression, the poly-histadine (His) tag is utilized for identification, and the enterokinase (EK) cleavage site can be used to remove the upstream promoter and tag regions. The bioactive site contains either an extended, cell-adhesive RGD sequence from native fibronectin or a negative-control scrambled sequence that is not cell-adhesive.

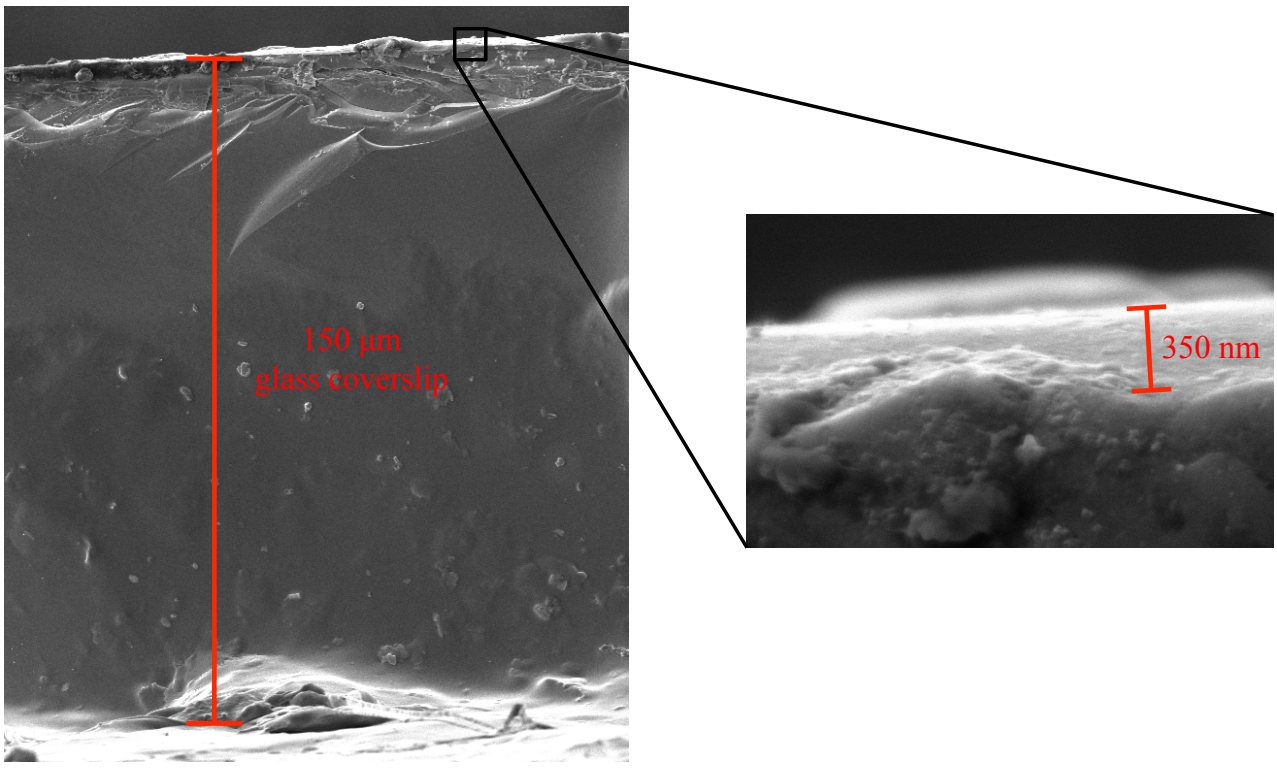

Fig. S2 Scanning electron micrograph of an ELP-D thin film spin coated on a glass coverslip (processed at 4,000 rpm, 90 sec). After spin coating, the ELP-D thin film was photocrosslinked and dehydrated. The entire glass coverslip was fractured and mounted on a 90-degree stub. Lower magnification (left) shows the entire cross-section of the glass coverslip and ELP-D thin film. The observed coverslip thickness, ~150 µm, matches that reported by the manufacturer (Fisher). Higher magnification (right) shows the dehydrated ELP-D coating has a thickness of ~350 nm.

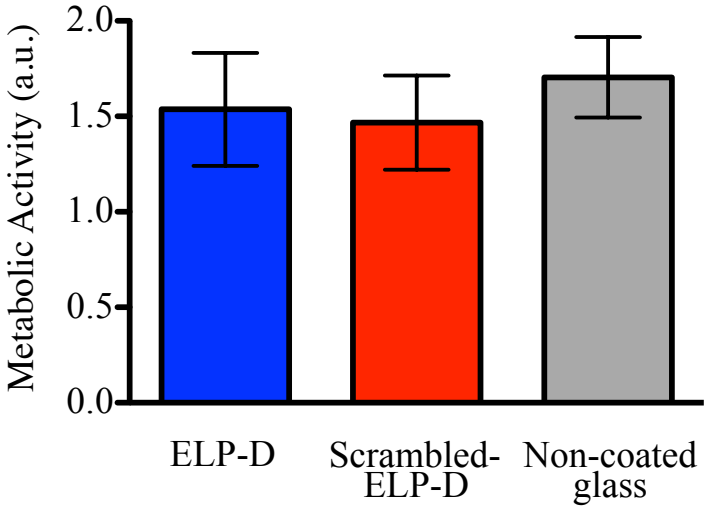

Fig. S3 hASC metabolic activity after 6 days in culture on ELP-D, scrambled-ELP-D, or non-coated glass coverslips. Metabolism levels were quantified by measuring the fluorescence produced due to reduction of alamarBlue® reagent. The level of metabolic activity for each group was normalized to total cell number. As expected, cells on all substrates were found to be similarly metabolically active.