

PHASE SEPARATED COMPOSITE

ABSTRACT OF THE DISCLOSURE

A composite is disclosed. The composite comprises a first conjugate of a polymer and a first phenol-containing moiety, and a second conjugate of a gelatin or collagen and a second phenol-containing moiety, wherein the polymer is selected so that the first conjugate is less cell-adhesive than the second conjugate, at least one of the first and second conjugates is crosslinked to form a matrix, and the composite comprises discrete regions that are rich in one of said first and second conjugates. A method of forming such composite is also disclosed. The method comprises mixing precursors for the first and second conjugates in a solution for forming said composite, and dispersing a catalyst in the solution to catalyze crosslinking of at least one of the first and second conjugates to form the matrix. The composite may be used to grow cells.

Figure 5A