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(54) Title: PEPTIDE AND GELATIN HYBRID HYDROGELS AS ECONOMICAL ALTERNATIVES TO COMMON BASEMENT-MEMBRANE MATRICES

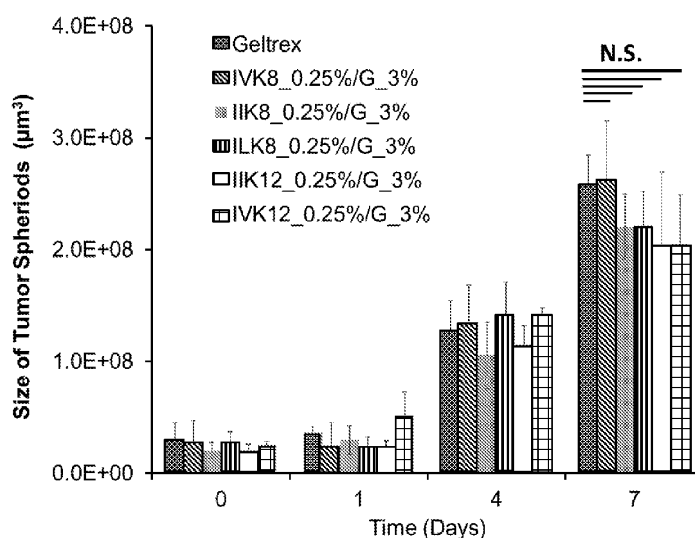


FIG. 12A

(57) Abstract: Described herein is a hydrogel comprising a peptide and gelatin. The peptide comprises a sequence having at least 8 amino acids with alternating hydrophobic amino acids (X) and hydrophilic amino acids (Y), wherein each hydrophobic amino acid is independently selected from isoleucine (I), valine (V) and leucine (L), each hydrophilic amino acid is independently selected from arginine (R), lysine (K), glutamic acid (E), and aspartic acid (D), wherein the hydrophilic amino acids are selected such that there is at least one arginine and at least one lysine. A kit and method for preparing the hydrogel is described as well. The hydrogel may be used to culture cells and determine an effect of a compound on a cell cultured in the hydrogel.

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