CLAIMS

1. A three-dimensional discontinuous entity for culturing of cells comprising
    a. an aqueous medium comprising a mixture of a first and second aqueous medium; and
    b. hydrogel bodies comprising cellulose nanofibrils and/or derivatives thereof suspended in the aqueous medium, the cellulose nanofibrils being obtained from plant-derived, mechanically disintegrated cellulose, wherein the cellulose nanofibrils and/or derivatives thereof are suspended in the aqueous medium, and wherein the hydrogel bodies have discontinuous structures, are separate or interconnected, and have different sizes and forms.
2. The three-dimensional discontinuous entity according to claim 1, wherein the ratio of total volume of the hydrogel bodies to total volume of the three-dimensional discontinuous entity is 10%-99% (v/v).
3. The three-dimensional discontinuous entity according to claim 1 or 2 wherein the hydrogel bodies are interconnected.
4. The three-dimensional discontinuous entity according to any one of claims 1-3 wherein a yield stress of the three-dimensional discontinuous entity is lower than a yield stress of a corresponding continuous hydrogel in the same conditions.
5. The three-dimensional discontinuous entity according to claim 4 wherein a yield stress of the three-dimensional discontinuous entity is 1-95% of a yield stress of the corresponding continuous hydrogel in the same conditions.
6. The three-dimensional discontinuous entity according to any one of claims 1-5 wherein the diameter of the cellulose nanofibrils is less than 1 µm.
7. The three-dimensional discontinuous entity according to any one of claims 1-6 wherein the cellulose nanofibrils comprise native ion-exchanged, chemically modified or physically modified derivatives of cellulose nanofibrils or nanofibril bundles.
8. The three-dimensional discontinuous entity according to any one of claims 1-7 wherein the aqueous medium is a cell culture medium comprising at least one nutrient source and at least one component required for sustaining undifferentiated, differentiating or differentiated cell growth.
9. A cell culture matrix comprising a cell or cells and/or a tissue or tissues and a three-dimensional discontinuous entity according to any one of the claims 1-8 wherein the cell or cells and/or tissue or tissues are present at least partially embedded in said entity in a three-dimensional or two-dimensional arrangement.

10. The cell culture matrix according to claim 9 wherein the cells are differentiated or undifferentiated mammalian cells.
11. The cell culture matrix according to claim 9 wherein the cells are undifferentiated stem cells.
12. The cell culture matrix according to claim 9 or 11 wherein the cells are embryonic stem cells or induced pluripotent stem cells.
13. The cell culture matrix according to any one of claims 9-12 wherein the cells are human cells or non-human cells.
14. The cell culture matrix according to claim 13 wherein the cells are non-human embryonic stem cells or induced pluripotent stem cells.
15. A kit comprising a first container comprising the three-dimensional discontinuous entity according to any one of claims 1-8, or the three-dimensional discontinuous entity according to any one of claims 1-8 in dehydrated form such as dry powder, concentrated granulate, or concentrated hydrogel body, and a second container comprising cellulase.
16. The three-dimensional discontinuous entity of any one of claims 1-8, further comprising one or more components selected from the group consisting of a cell culture medium, an extra cellular matrix component, a serum, growth factor, a protein, an antibiotic and a preservative.
17. The three-dimensional discontinuous entity of any one of claims 1-8, wherein the discontinuous structure of the hydrogel bodies is a homogeneous structure broken by mixing.
18. The three-dimensional discontinuous entity of any one of claims 1-8, wherein the hydrogel bodies are interconnected hydrogel bodies having aqueous cavities positioned therebetween.
19. The three-dimensional discontinuous entity of any one of claims 1-8, wherein the hydrogel bodies are loosely connected and floating within the mixture.
20. The three-dimensional discontinuous entity of any one of claims 1-8, further comprising cells, the hydrogel bodies being indirectly connected to one another via the cells.
21. The three-dimensional discontinuous entity of any one of claims 1-8, wherein the second aqueous medium is a cell culture medium.
22. The three-dimensional discontinuous entity of any one of claims 1-8, wherein proteases are undetectable in the three-dimensional discontinuous entity.
23. The three-dimensional discontinuous entity of any one of claims 1-8, wherein the cellulose nanofibrils are sterilized.