

[54] RECONSTITUTED BASEMENT MEMBRANE COMPLEX WITH BIOLOGICAL ACTIVITY

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[57] ABSTRACT

The present invention discloses a biologically active basement membrane composition. When polymerized under physiological conditions, the composition forms gel-like structures whose ultrastructure resembles interconnected thin sheets of the lamina densa zone of basement membrane. The major components of the composition include laminin, type IV collagen, heparin sulfate proteoglycan, entactin and nidogen. These components polymerize in constant proportions when redissolved and allowed to reconstitute. Molecular sieve studies on the soluble extract demonstrate that laminin, entactin and nidogen are associated in a large but dissociable complex. The reconstituted matrix is biologically active and stimulates the growth and differentiation of a variety of cells, including epithelial cells, nerve cells, hair follicles and the like. The reconstituted matrix can also be used for determining metastatic potential of tumor cells and for isolating metastatic tumor cells.

11 Claims, 7 Drawing Sheets

