

Laminin inhibits amyloid- β -peptide fibrillation

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Abstract

Laminin, an important extracellular matrix component is induced by brain injury and colocalizes with amyloid- β -peptide (A β) deposits in Alzheimer brains. We report here that laminin inhibits amyloid fibril formation as determined by thioflavin T fluorescence spectroscopy and electron microscopic examination. The inhibition of amyloid formation by laminin was concentration dependent and was observed at a laminin concentration of 300 nM, corresponding to a laminin/A β protein molar ratio of 1:800. The potential effect of laminin, may prove important to inhibit A β fibrillogenesis in vivo, specifically at the level of cerebral blood vessels.