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CD 18-mediated adhesion is required for the induction of a proinflammatory phenotype in lung epithelial cells by mononuclear cell-derived extracellular vesicles

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Abstract

Extracellular vesicles are submicron vesicles that upregulate the synthesis of proinflammatory mediators by lung epithelial cells.

We investigated whether these structures adhere to lung epithelial cells, and whether adhesion is a prerequisite for their proinflammatory activity.

Extracellular vesicles were generated by stimulation of normal human mononuclear cells with the calcium ionophore A23187, and labelled with carboxyfluorescein diacetate succinimidyl ester. Adhesion of vesicles to monolayers of immortalized bronchial epithelial (16HBE) and alveolar (A549) cells was analysed by fluorescence microscopy. The role of