SYNTHESIS OF FLUORESCENT DENDRIMERIC ANTIGEN EFFICIENTLY INTERNALIZED BY HUMAN DENDRITIC CELLS

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A new fluorescent dendrimeric antigen (DeAn) based on a dendron with amoxicilloyl terminal groups has been synthetized. The synthesis implies a novel class of all-aliphatic polyamide dendrimer (BisAminoalkylPolyAmide Dendrimers, or BAPAD).[1] The introduction of a cystamine core allows the incorporation of this dendrons into a 1,8-naphthalimide fluorofore functionalized with a maleimide group. The fluorescence properties of this DeAn has been studied and compared with the properties of an equivalent dendron possessing amino-terminal groups.

This DeAn has been used as a synthetic antigen in a biomedical assay that tests the amoxicillin sensitivity of dendritic cells (DC) from tolerant and allergic patients.