Abstract

BACTERIALLY DERIVED, INTACT MINICELLS FOR DELIVERY OF THERAPEUTIC AGENTS TO BRAIN TUMORS

Systemic administration of intact, bacterially derived minicells results in rapid accumulation of the minicells in the microenvironment of a brain tumor, in therapeutically significant concentrations, without requiring endothelial endocytosis/transcytosis across the blood brain barrier or any other mechanism by which, pursuant to conventional approaches, nanoparticles have entered into that microenvironment. Accordingly, a wide variety of brain tumors, both primary and metastatic, can be treated by administering systemically a therapeutically effective amount of a composition comprised of a plurality of such minicells, each minicell being a vehicle for an active agent against the tumor, such as a radionuclide, a functional nucleic acid or a plasmid encoding one, or a chemotherapeutic agent.

[Figure 1]