

489e Virus Engineering for Targeted Gene Delivery

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We devised a new strategy to engineer nanoparticles for targeted gene delivery. The nanoparticles we deal with are viruses with the size of 100 nm. We found that recombinant viruses incorporated with membrane-bound antibodies can specifically infect cells expressing the cognate antigens. We have demonstrated that this general method worked for many antibodies and several cell types. Animal experiments have been designed to evaluate the efficacy of in vivo gene delivery using this method.