

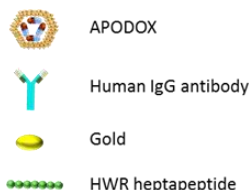
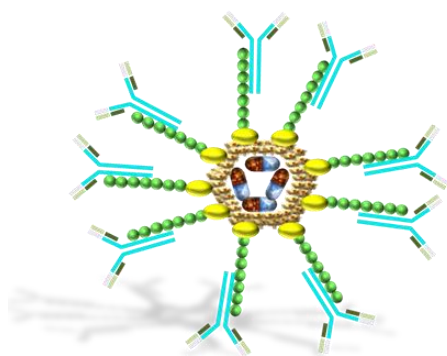
Vás zve na seminář:

The modification of apoferritin with antibodies for targeted delivery of cytotoxic drugs

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Abstract

There are numerous negative side effects accompanying the administration of cytotoxic drugs. These side effects can be lowered or even eliminated by their encapsulation in a suitable carrier. Targeting moieties, including antibodies can be attached to nanocarrier, reducing the amount of drug



administered in patient's circulation and thus minimizing the toxicity and side effects. The attachment of antibodies to the nanocarrier surface can be realized by covalent coupling, physical and/or hydrophobic adsorption. One of frequently used methods is based on affinity of biotin to streptavidin/avidin. However, this results in creating of relatively large nanoparticle

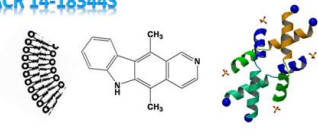
and moreover it is not possible to control the orientation of antibody towards the nanocarrier surface and the antibody contains multiple biotinylated sites. To eliminate these problems, a linker between the antibody and the nanocarrier can be used. In this study, antibody targeted, apoferritin mediated and pH triggered transport of cytostatic drug doxorubicin was studied using fluorescent properties of DOX.

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NANO-CHEMO

Vývoj nanočástic obsahujících cytostatika a enzymy pro zlepšení chemoterapie lidských neuroblastomů a studium mechanismu jejich působení
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