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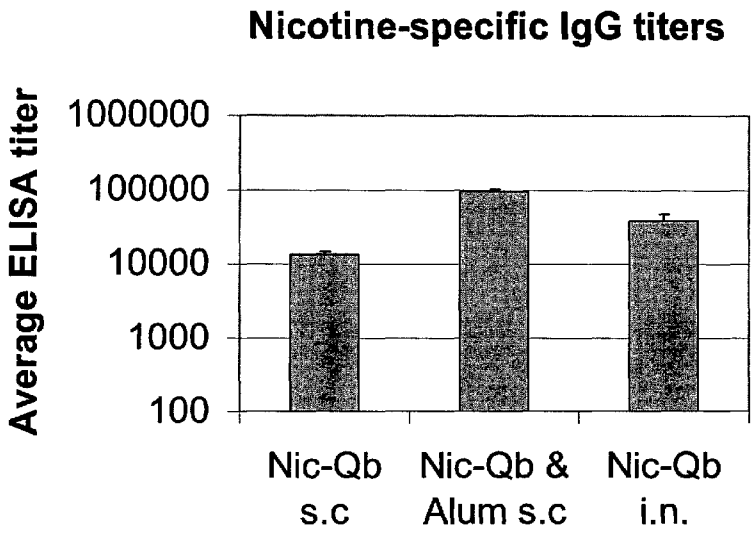
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(54) Title: HAPTEN-CARRIER CONJUGATES COMPRISING VIRUS LIKE PARTICLES AND USES THEREOF



(57) Abstract: The present invention provides compositions comprising a conjugate of a hapten with a carrier in an ordered and repetitive array, and methods of making such compositions. The conjugates and compositions of the invention may comprise virus like particles derived from eukayotic virus or bacteriophage as carriers, coupled to a variety of haptens, including hormones, toxins and drugs, especially drugs of addiction such as nicotine. Compositions and conjugates of the invention are useful for inducing immune responses against haptens, which can use useful in a variety of therapeutic, prophylactic and diagnostic regimens. In certain embodiments, immune responses generated using the conjugates, compositions and methods of the present invention are useful to prevent or treat addiction to drugs of abuse and the resultant diseases associated with drug addiction.

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