Analytical and Bioanalytical Chemistry

Electronic Supplementary Material

Characterization and optimization of heroin hapten-BSA conjugates: method development for the synthesis of reproducible hapten-based vaccines

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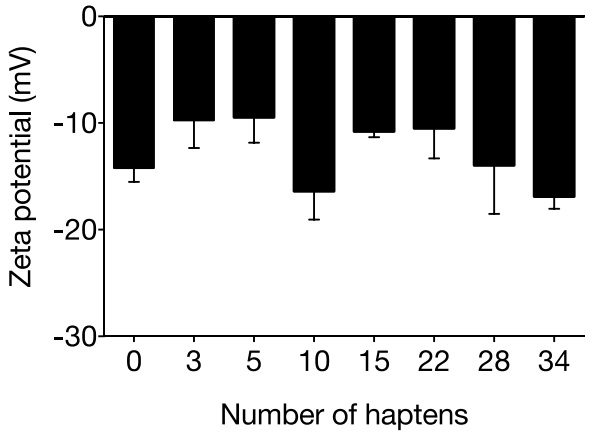

Fig. S1 Zeta potential of BSA and MorHap-BSA conjugates. Zeta potential of the proteins (1 mg/mL, DPBS pH 7.4, 25 °C), was measured using Zetasizer Nano ZS (Malvern Instruments Ltd, Worcestershire, UK). There were no significant differences in the zeta potential of BSA and MorHap-BSA conjugates (one-way ANOVA). Values are the mean of triplicate determinations ± standard deviation.

Table S1 Contact angle of BSA and MorHap-BSA conjugates.

Number of Haptens[a]	Contact angle (degrees)[b]
0	87.7 ± 7.2
3	92.0 ± 5.3
5	87.0 ± 8.0
10	85.0 ± 6.0
15	84.3 ± 1.5
22	90.3 ± 5.0
28	85.0 ± 3.0
34	83.3 ± 0.6

[a] Contact angle of the protein solutions (350 ug/mL, DPBS pH 7.4, 25 °C) was measured against an Immulon™ 2HB flat ELISA plate (Thermo Scientific, Marietta, OH) using the static sessile drop method (Reference S1).
[b] There were no significant differences in the contact angle of the protein solutions (one-way ANOVA). Values are the mean of triplicate determinations ± standard deviation.

Reference S1: Bracco, G., Holst, B. (2013) Surface Science Techniques, Springer Series in Surface Sciences, Vol. 51, Springer-Verlag, Berlin, Heidelberg.