Electronic Supplementary Material (ESI) for Biomaterials Science. This journal is © The Royal Society of Chemistry 2023

Supplementary Information

## Modification of antigenicity of cancer cells by conjugate consisting of hyaluronic acid and foreign antigen

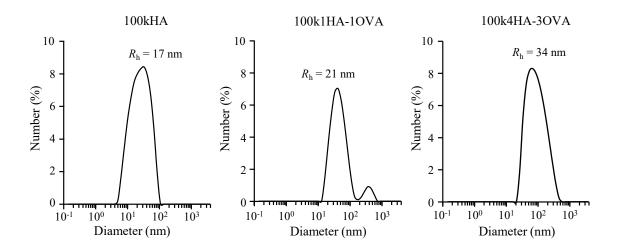
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**Fig. S1** Size distribution of 100kHA, 100k1HA-10VA, and 100k4HA-30VA determined by DLS.

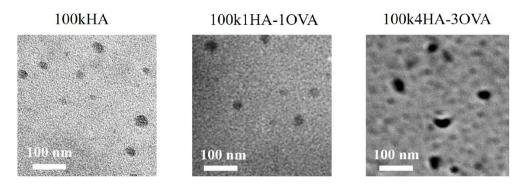
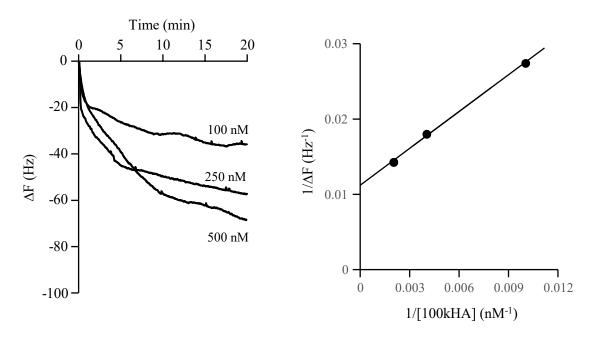
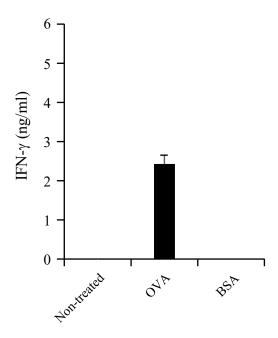


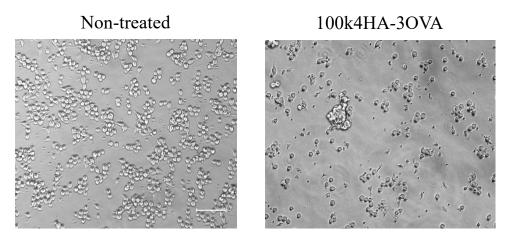
Fig. S2 TEM images of 100kHA, 100k1HA-10VA, and 100k4HA-30VA.



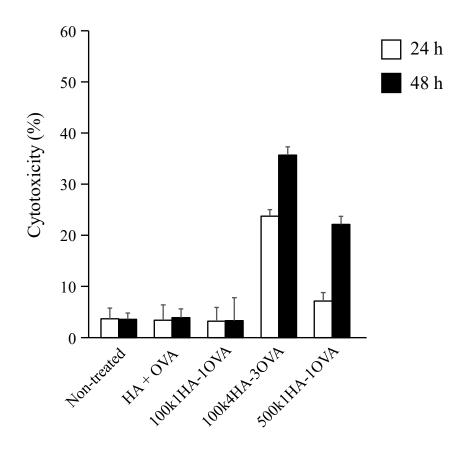
**Fig. S3** Time courses of frequency decrease in rCD44-immobilized QCM in response to the addition of 100kHA at the indicated concentrations (left), and the associated linear reciprocal plots of  $1/\Delta F$  against 1/[100kHA] (right).



**Fig. S4** Induction of OVA-specific CTLs. Splenocytes obtained after immunization with OVA and CpG-DNA were stimulated with OVA or BSA at 10 μg/ml for 24 h. IFN- $\gamma$  in the supernatant was determined with a Murine IFN- $\gamma$  ELISA Development Kit. Results are represented as the mean  $\pm$  S.D. (n = 3).



**Fig. S5** Microscopic observation of CT 26 cells treated with (right panel) or without (left panel) 100k4HA-3OVA conjugate after 48 h of incubation with splenocytes including OVA-specific CTLs at an E/T ratio of 50:1. Before observation, the splenocytes and dead cells were washed out. The bar represents 100  $\mu$ m.



**Fig. S6** Cytotoxic effects of OVA-specific CTLs on CT26 cells treated with the indicated HA-OVA conjugates at an E/T ratio of 50:1. At 24 (white bar) and 48 h (black bar), the amount of LDH in the supernatants was determined. Results are represented as the mean  $\pm$  S.D. (n = 3).