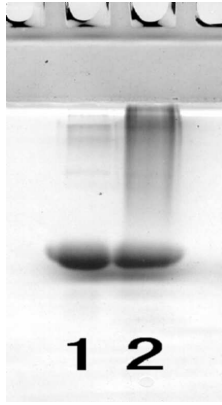


## Supporting Information

**Measurement.** Sodium dodecyl sulfate polyacrylamide gel electrophoresis (SDS–PAGE) was carried out on a gel electrophoresis apparatus (JM250, JM-X Scientific Company) to analyze the molecular weights of BSA and BSA–dextran conjugates. The gel was stained with Coomassie brilliant blue and the BSA content in each track was analyzed using a standard gray scale analysis method by Bandsan software (Glyko Inc.).

**Result.** Figure S1 shows SDS–PAGE analysis of BSA and BSA–dextran conjugates prepared with the Maillard reaction. Before the reaction, BSA is mainly a single band. After the reaction, a new smear band with much higher molecular weight appears, indicating the formation of BSA–dextran conjugates [Jung, S. H.; Choi, S. J.; Kim, H. J.; Moon, T. W., Molecular characteristics of bovine serum albumin–dextran conjugates. *Bioscience Biotechnology and Biochemistry* **2006**, 70, (9), 2064-2070].

The conjugation degree of the conjugates was analyzed by the standard gray scale analysis method. Compared with the gray in each whole lane, the gray of the smear band is 41.2% after subtracting the 1.9% impurity. That is, there is about 41.2% of BSA conjugated with dextran after the Maillard reaction.



**Figure S1.** SDS–PAGE analysis of native BSA (lane 1) and BSA–dextran conjugates (lane 2) prepared with molar ratio of BSA to dextran 1:1 after the Maillard reaction. In each lane, 10  $\mu$ L of sample with a BSA concentration of 5 mg/mL was loaded.