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SPR signals enhancement by gold nanorods for cell surface marker detection

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Methods:

Flow cytometry assay

Prior to flow cytometry analysis, cells were collected by 0.25% Trypsin-EDTA solution. Following centrifugation at 1500 rpm for 10 min and washing with PBS, the cells were blocked with 1% BSA for 20 min. Then, 1 µl of Alexa Fluor488-conjugated anti-human VE-cadherin antibody was added to cell solution and incubated for 1h at 4°C. After washing twice, flow cytometry analysis was performed using a FACSCalibur (BD Bioscience) system and data were processed by FlowJo software ver.7.6.1.

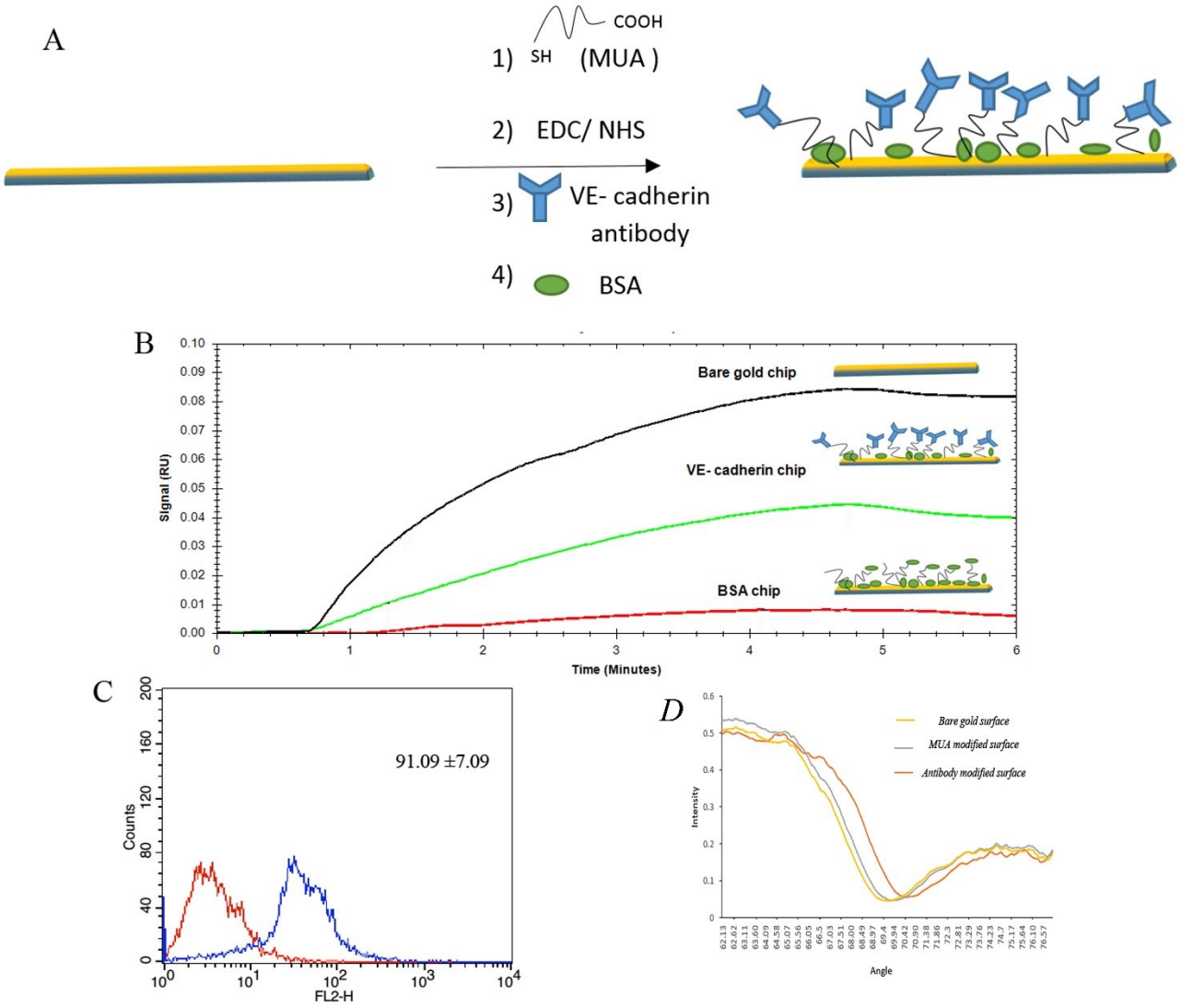

Fig. S1. (A) VE-cadherin immobilization on gold chip (B) related sensograms for HUVEC cell injection (flow rate: 20 µl/min and time: 5 min) on three different surface of gold chips (black curve: bare gold surface, green curve: VE- cadherin coated chip and red curve BSA coated chip) (C) Flow cytometric analysis of VE-cadherin expression on HUVEC cells (red curve: isotype control and green curve: HUVECs cells) (D) Angle shift of SPR curves in immobilization step.

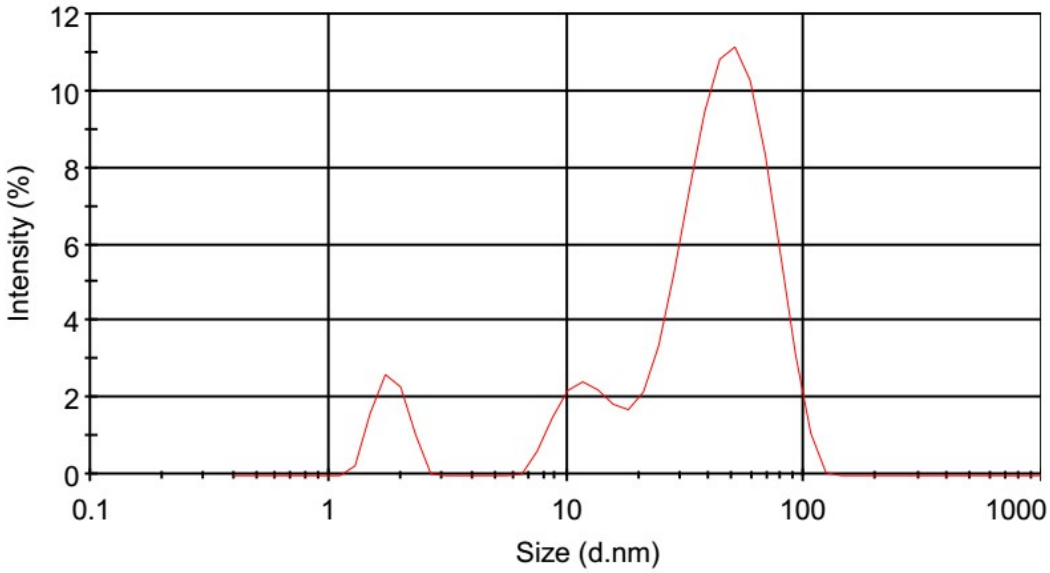

Fig. S2.Hydrodynamic diameter distribution plots as determined by DLS measurements for GNR-Strep