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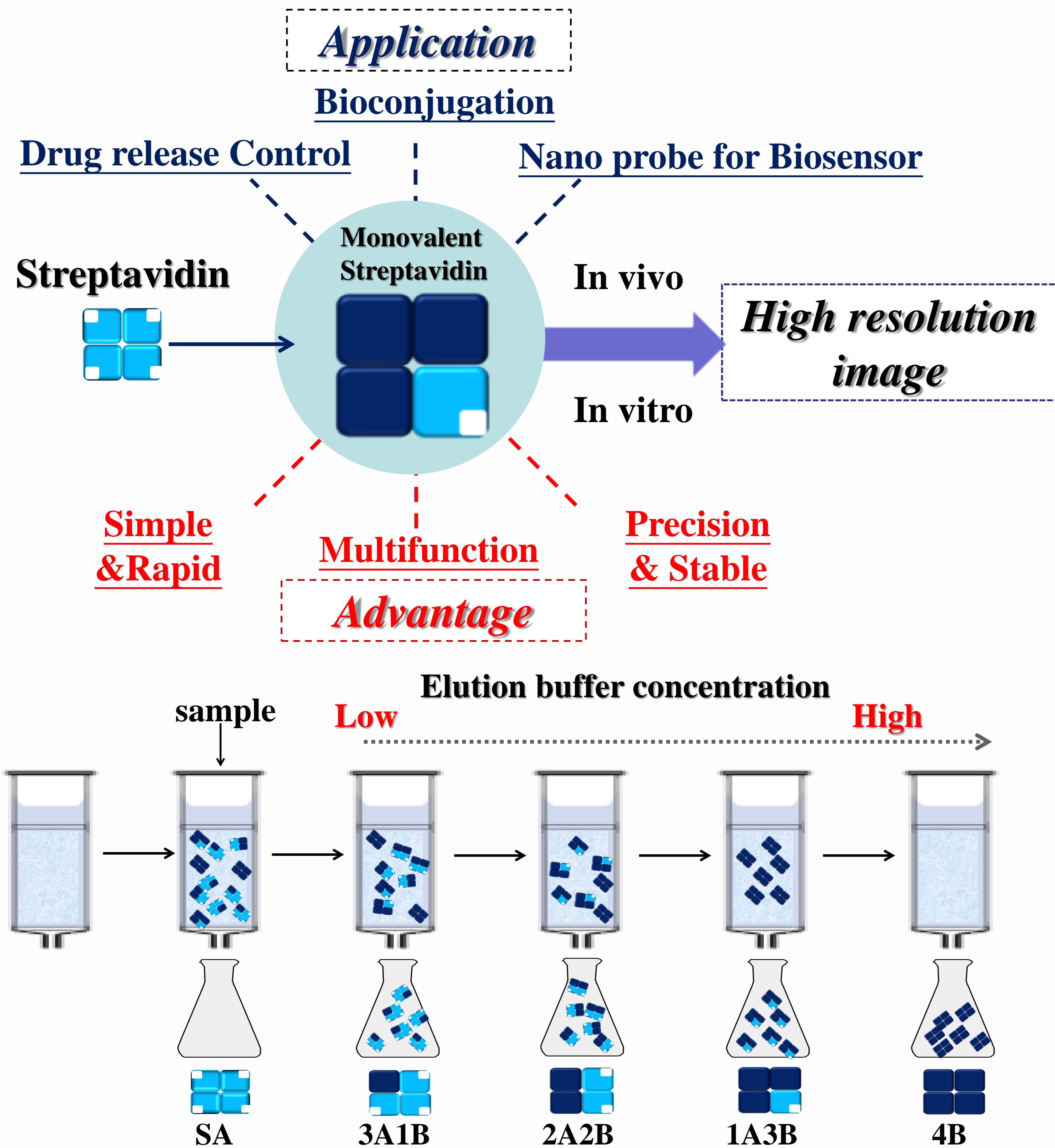
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經修飾功能性粒子以及單一價數經修飾卵白素類粒子之製備方法 METHOD FOR PREPARING SINGLE-VALENT, MODIFIED AVIDIN-LIKE MOLECULES

AND MODIFIED FUNCTIONAL CONJUGATES

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N-valent SA control and isolation

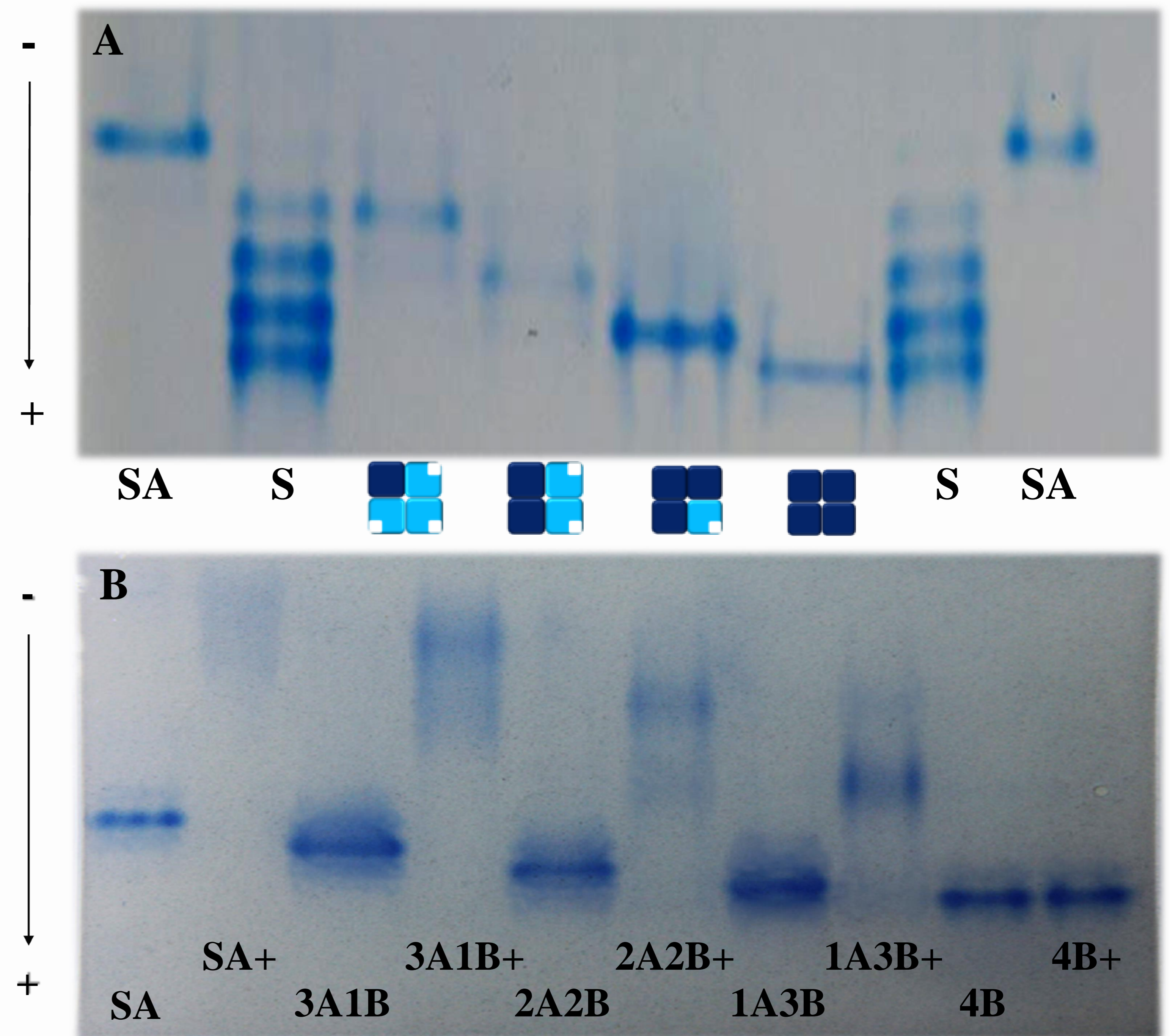


Fig 1. Streptavidin n-valent control and isolation. A) The corresponding gel image B) PEG (biotin-PEG_{3k}-NH₂) were added to n-valent SA (n = 3, 2, 1, and 0), respectively and performed with Native PAGE electrophoresis. SA, streptavidin; S, standard sample which contained n-valent SAs (n = 4, 3, 2, 1, and 0; the bands were from top to bottom); 3A1B, three-valent SA; 2A2B, two-valent SA; 1A3B, monovalent SA; 4B, 0-valent SA

Assembly of n-valent SA and AuNP

● Biotinylated 6-nm AuNP

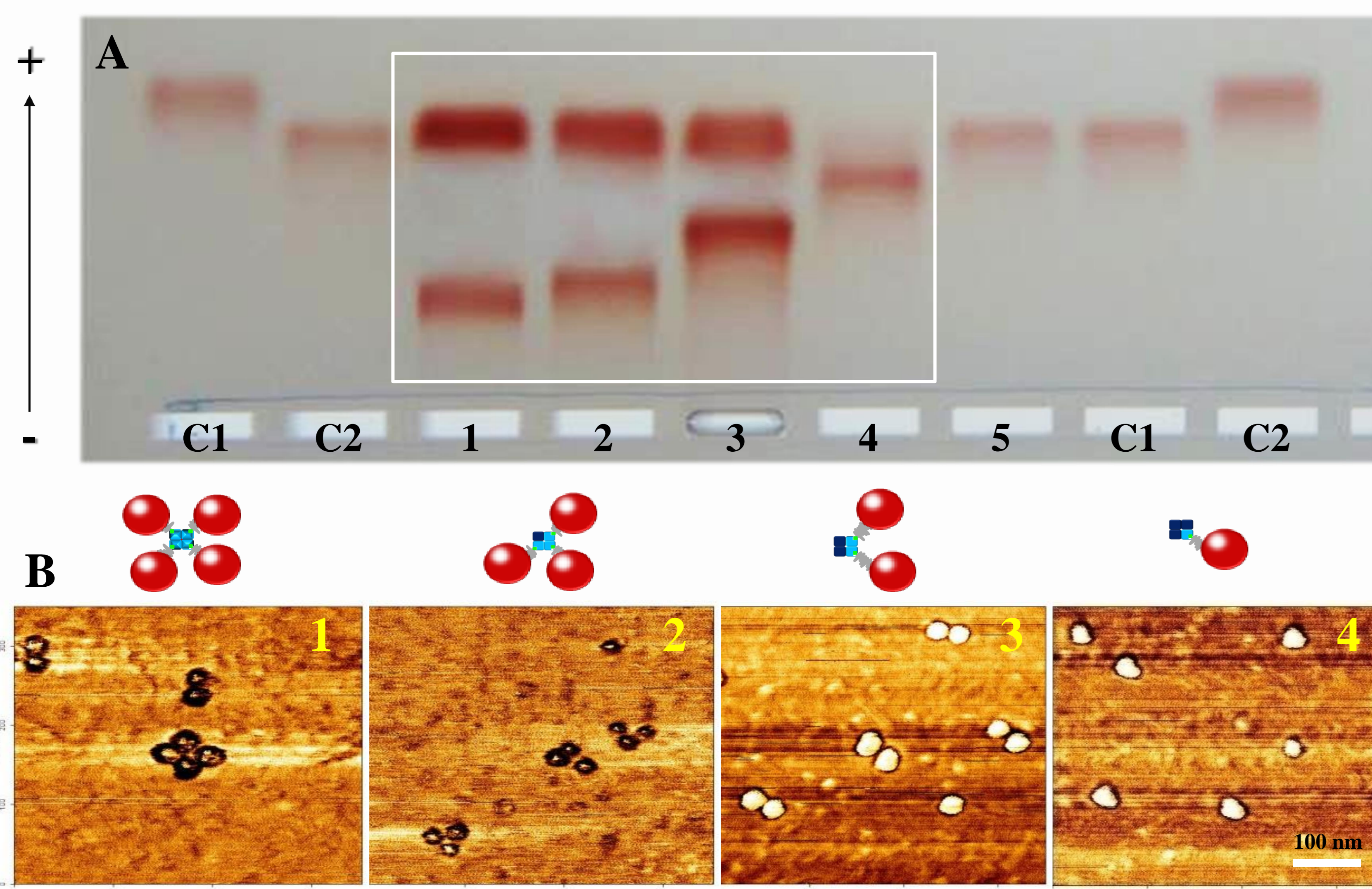


Fig 2. Assembly of n-valent SA and biotinylated AuNP A) The n-valent SA conjugated with n biotinylated 6-nm AuNPs (n = 4, 3, 2, and 1; the left to right bands in white box) in agarose gel B) the phase image in atomic force microscope

■ 6-nm AuNP-monovalent SA ● Biotinylated 15-nm AuNP

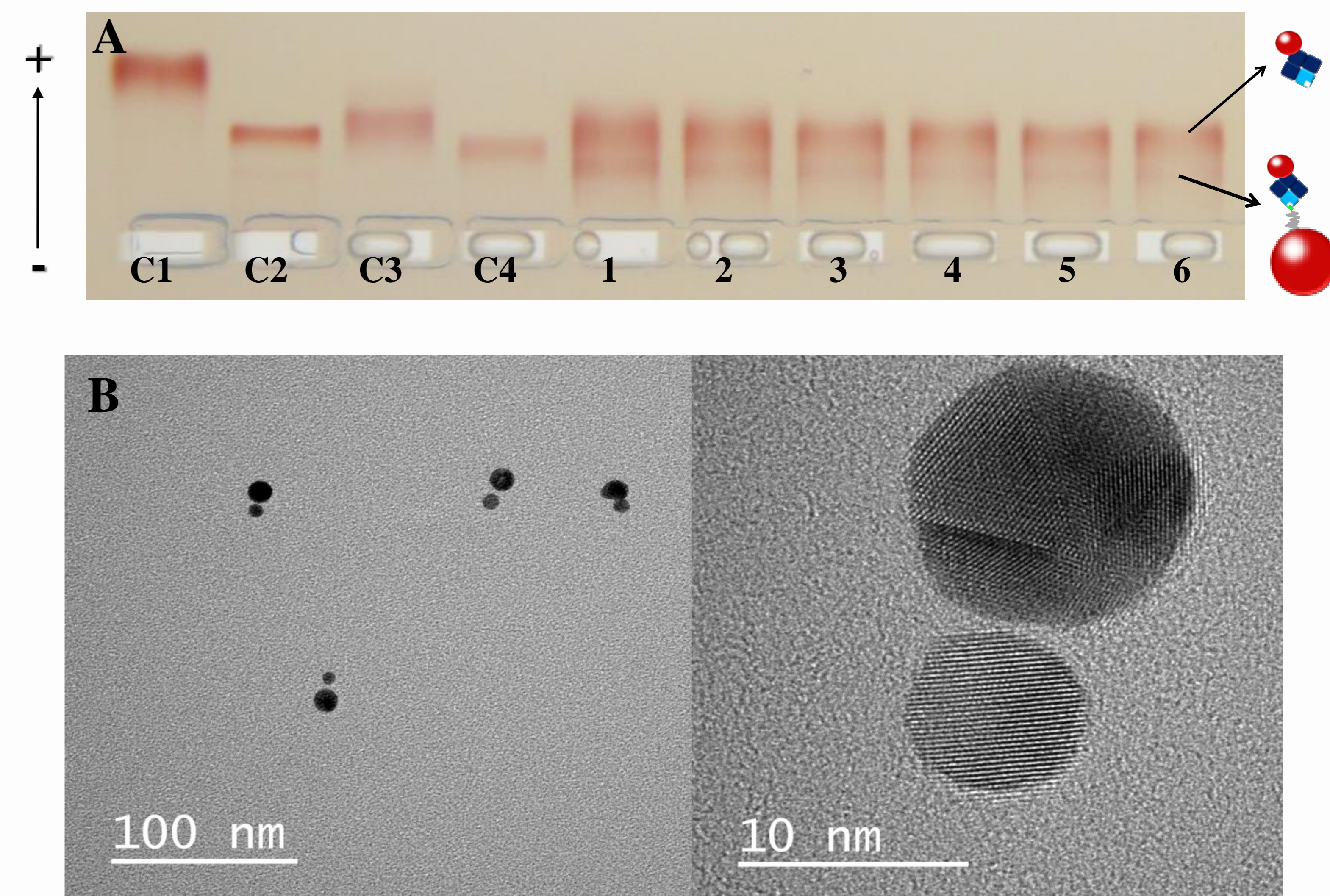


Fig 3. Assembly of monovalent SA and two different size AuNPs A) The monovalent SA conjugated with 6-nm AuNP and bounded with biotinylated 15-nm AuNP in agarose gel B) TEM images C1, 6-nm AuNP; C2, 6-nm AuNP-monovalent SA; C3, 15-nm AuNP; C4, biotinylated 15-nm AuNP.