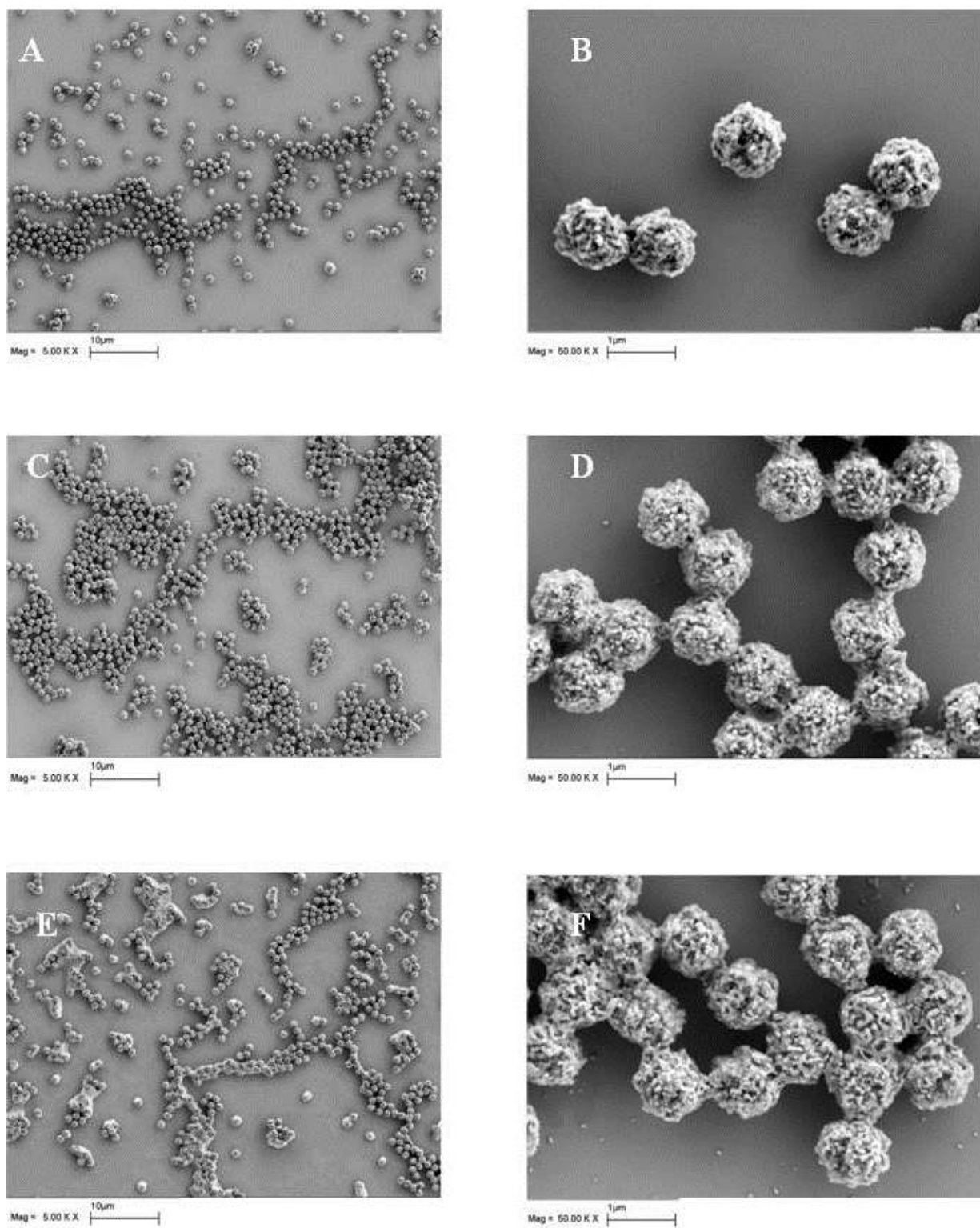


## Supplementary Data

**Table 1:** Comparison of similar reports

<b>Method</b>	<b>%Recovery</b>	<b>Time (h)</b>	<b>Ref</b>
Streptavidin beads from un-purified single biotinylated PCR product	~ 63.±7.7	1-2	1,2
Streptavidin beads from single biotinylated purified PCR product	~ 52±8.0	1-2	3,4
T7 Gene 6 Exonuclease	~ 59±9.0	1.5-2	3
Lambda Exonuclease	~ 69±6.9	1.5-2	2,3,5
A-PCR with T7 Enzyme	~ 84±6.2	1.5-2	3
T7 Gene 6 Exonuclease	~ 54±7.0	1.5-2	2
Streptavidin induced electrophoretic mobility shift assay	~30	1.5-2	6
Magnetic beads from un-purified dual biotinylated PCR product	~ 72±3.1*	~1	Current report

\*The value is showing Mean of 5 different benches (Please refer to Fig 5 in the original Manuscript)



**Figure 1:** SEM images of the streptavidin coated beads incubated with 25 μl (A and B), 50 μl (C and D) and 75 μl (E and F) of PCR reaction. Scale is 10 μm for A, C, E and 1 μm for B, D, and F.

## Polydispersity Index

Polydispersity Index (PDI) is a number calculated from a simple two parameter fit to the correlation data called a cumulants analysis.<sup>7</sup> The Polydispersity Index is dimensionless and scaled such that values smaller than 0.05 are rarely seen other than with highly monodisperse standards.<sup>8</sup> Values greater than 0.7 indicate that the sample has a very broad size distribution and is probably not suitable for the dynamic light scattering (DLS) technique.<sup>9,10</sup>

When DLS sizing data is compared to Electron Microscopy (EM) images, the aggregation state of the particles can be determined. In an un-agglomerated suspension, the DLS size measured will be similar or slightly larger than the EM size. If the particles are agglomerated, the DLS measurement is often much larger than the EM size and can have a high polydispersity index (large variability in the particle size).<sup>11</sup>

**Table 2:** Hydrodynamic size and Polydispersity Index (PDI) results from DLS measurements

<b>Sample</b>	<b>Hydrodynamic Size (d.nm)</b>	<b>Polydispersity Index</b>
Naive Beads	1185	0.019
Incubated with 25 $\mu$ l of dsDNA	1212	0.018
Incubated with 50 $\mu$ l of dsDNA	1224	0.021
Incubated with 75 $\mu$ l of dsDNA	1243	0.386

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