Zein microneedles for transcutaneous vaccine delivery: fabrication, characterization and in-vivo evaluation using ovalbumin as model antigen

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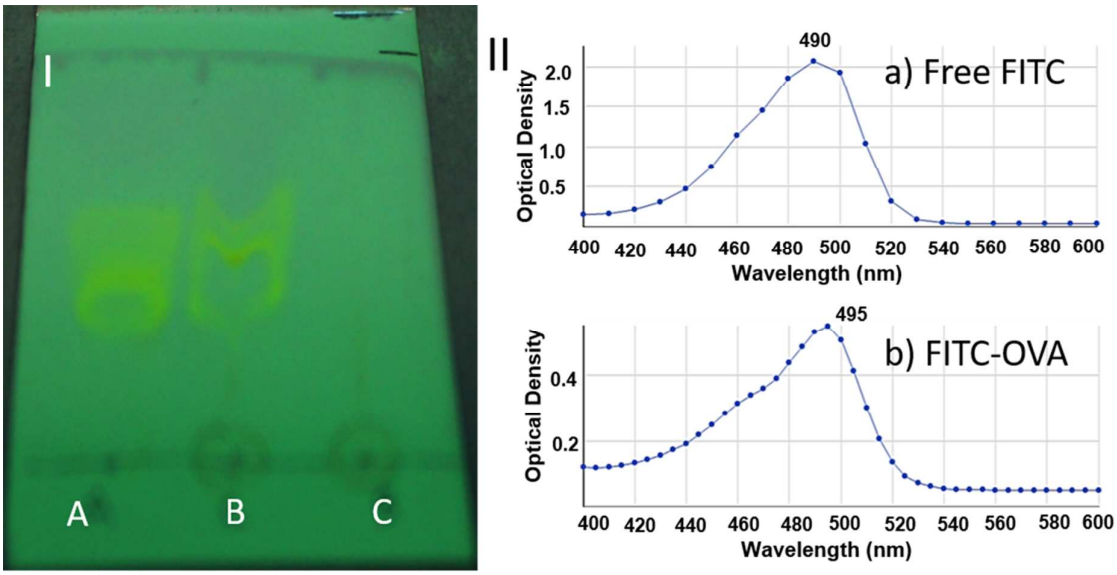

Figure S1. Thin layer chromatography showing spots after reaction for FITC conjugation of ovalbumin A) Free FITC B) Reaction mixture C) Co-spot of A and B. II. Shift in $\lambda_{max\ for}$ FITC-OVA (b) compared to free FITC (a)

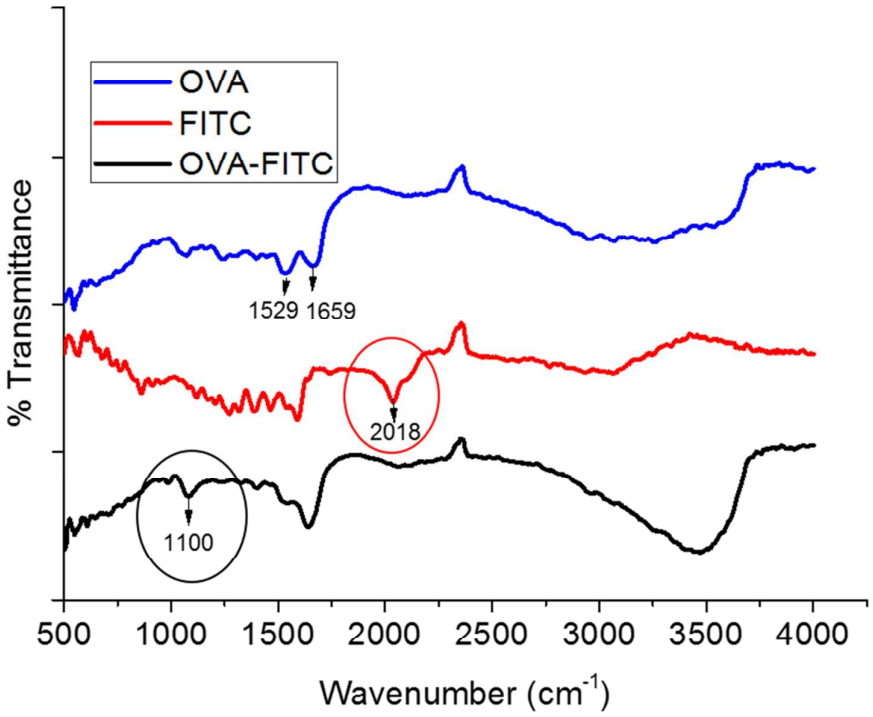

Figure S2. FT-IR spectra for pure ovalbumin, FITC and FITC-OVA conjugate. The ellipse represents characteristic isothiocyanate peak for FITC and appearance of thiourea stretching bands for FITC-OVA conjugate. Each spectra is representative of three different runs.

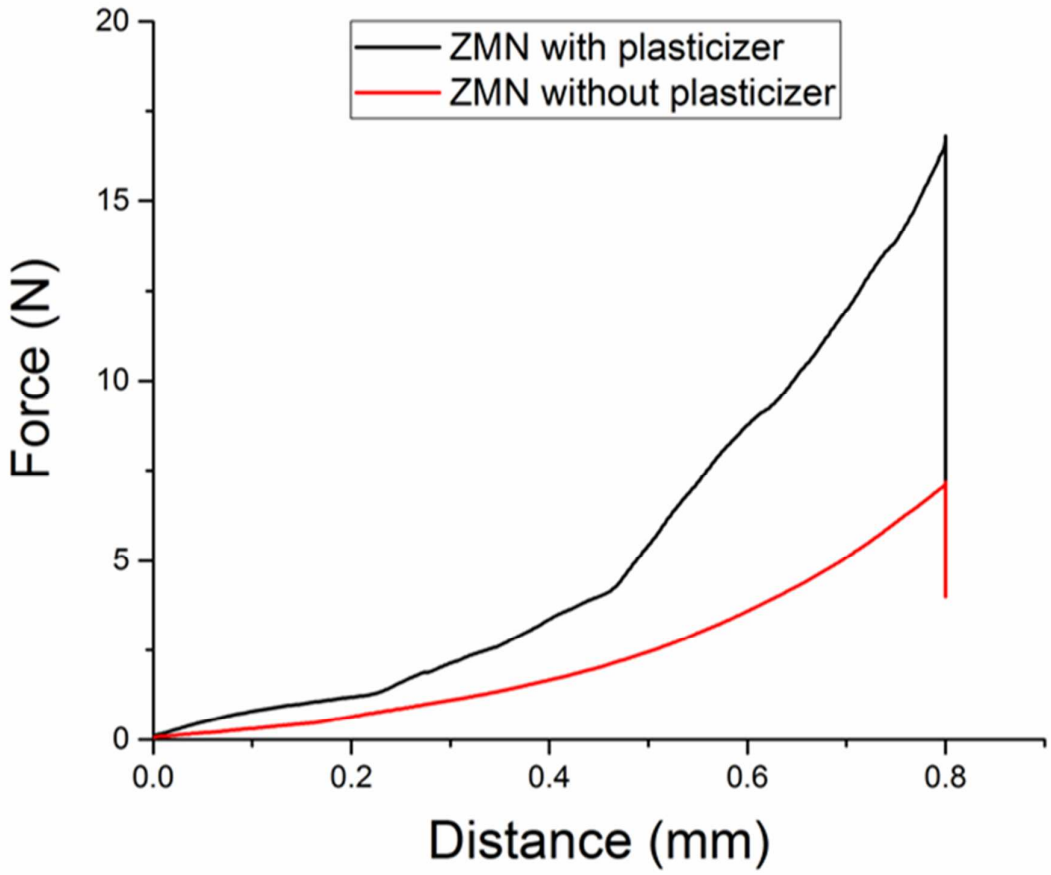

Figure S3. Texture analyser force displacement plots for investigating the effect of plasticizer on the strength of zein MN. A cylindrical Delrin probe (10mm Diameter) was lowered on the microneedle array placed using a two sided tape on a heavy duty metal base. A test speed of 0.5 mm/s was employed for the measurement. Each plot represents average of three experiments.