

## Online Supplementary Information

### Enhanced Cationic Charge is a Key Factor in Promoting Staphylocidal Activity of $\alpha$ -Melanocyte Stimulating Hormone via Selective Lipid Affinity

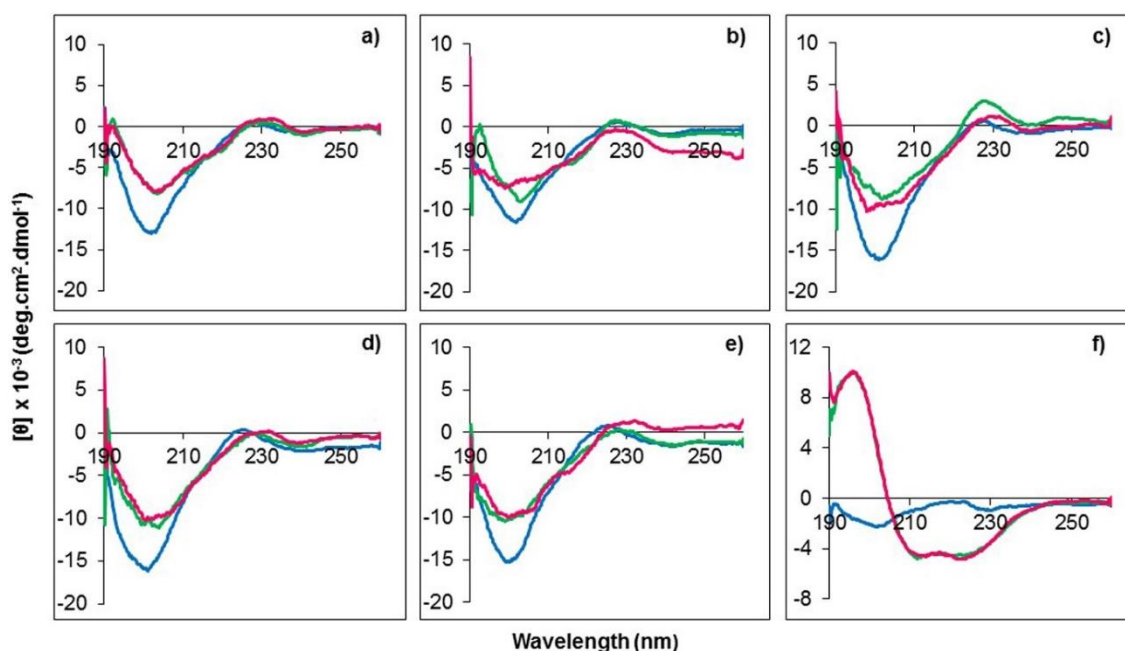
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**Supplementary Fig. S1: CD spectra of  $\alpha$ -MSH and designed analogues.** (a)  $\alpha$ -MSH, (b) K-MSH, (c) KK-MSH, (d) KKA-MSH, (e) KKK-MSH and (f) Magainin II in the presence of buffer (blue), DMPC:DMPG (7:3, w/w) SUVs (green) and DMPC:DMPG (1:1, w/w) SUVs (pink). Peptide and lipid concentrations were 25  $\mu$ M and 2,500  $\mu$ M, respectively (L:P = 100:1). The mean residue ellipticity was plotted against wavelength. Each plot represents average of three scans.