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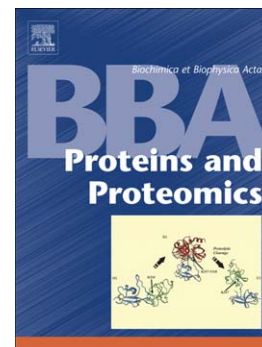
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## Tailoring thermal treatment to form lipotide complexes between oleic acid and different proteins

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Running title: Formation of lipotides at different temperatures

Key words: Protein-fatty acid complexes; HAMLET; oleic acid; thermal cycles; SAXS; Circular dichroism.

Abbreviations: apo-aLA, Calcium-depleted alpha-lactalbumin; BSA, Bovine serum albumin; CD, Circular Dichroism;  $D_{\text{shell}}$ , Thickness of protein shell of lipotide, in lipotide model; HAMLET, Human alpha-lactalbumin made lethal to tumour cells; Lipotides, Complexes between fatty acids and partially unfolded protein; MRW, Mean residue ellipticity;  $N_{\text{mic/cluster}}$ , Number of micelles per lipotide cluster;  $N_{\text{OA/mic}}$ , Number of OA molecules per micelle;  $N_{\text{OA/prot}}$ , Number of OA molecules per protein;  $N_{\text{prot/mic}}$ , Number of proteins per micelle; Ova, Ovalbumin; OA, Oleic acid or Oleate;  $P(r)$ , Pair distance distribution; PBS, Phosphate buffered saline;  $R_{\text{in}}$ , Radius of the micelle fatty acid core of lipotide; RP-HPLC, Reversed-phase high performance liquid chromatography; SAXS, Small-angle X-ray scattering; SEC, Size-exclusion chromatography; SLD, Scattering length density.

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