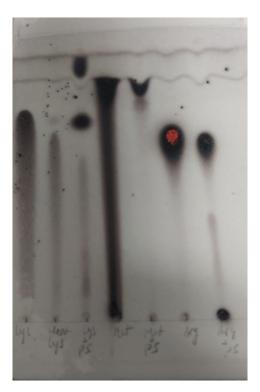
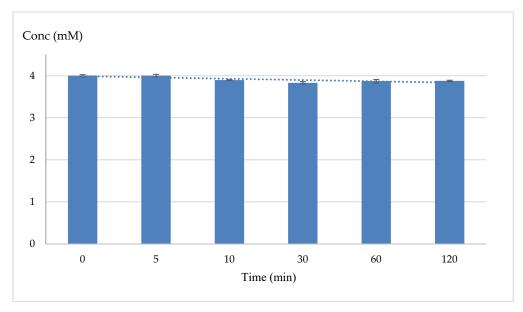




## Supplementary Files.



**Figure S1.** Thin Layer Chromatography (TLC) of reaction models between protected reactive amino acids (N<sub>α</sub>-Boc-arginine, N<sub>α</sub>-Boc-lysine and N<sub>α</sub>-Boc-methionine) and oxysterol (cholesterol  $5\alpha$ , $6\alpha$ -epoxide). Incubation was performed at 160 °C for 60 min. Spot separation was observed spot separations were observed from mixture models containing cholesterol  $5\alpha$ , $6\alpha$ -epoxide with N<sub>α</sub>-Boc-lysine. From left to right: N<sub>α</sub>-Boc-lysine (T0), Heated N<sub>α</sub>-Boc-lysine (160 °C for 60 min), N<sub>α</sub>-Boc-lysine + cholesterol  $5\alpha$ , $6\alpha$ -epoxide, N<sub>α</sub>-Methionine, N<sub>α</sub>-Methionine + cholesterol  $5\alpha$ , $6\alpha$ -epoxide, N<sub>α</sub>-Arginine + cholesterol  $5\alpha$ , $6\alpha$ -epoxide.



**Figure S2.** Levels of cholesterol  $5\alpha$ ,  $6\alpha$ -epoxide in blank samples over the incubation time at  $180^{\circ}$ C.