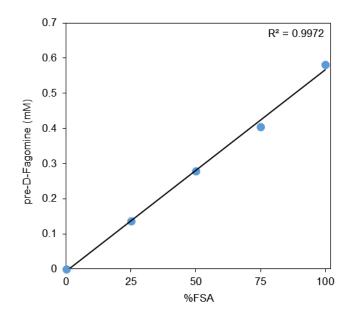
## Activity test (HPLC)

This test consists in the target aldol addition of DHA to  $\beta$ -CHO catalyzed by FSA, measuring the formation of preFagomine on HPLC. This test shows great linearity at within the experimental range of FSA concentration.



**S3 Fig.** The relation between percentage of FSA activity and product formation in the activity test of the DHA aldol addition to  $\beta$ -CHO. %FSA stands for the initial active amount of FSA used in the screening of FSA onto mNC (0.02 U ml<sup>-1</sup>).