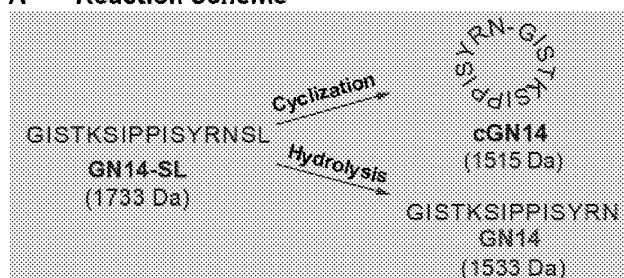


**A Reaction scheme****C pH-dependent product yield**

□ Hydrolysis ■ Cyclization

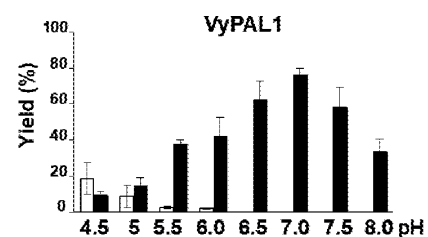
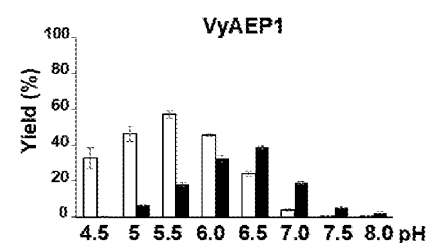
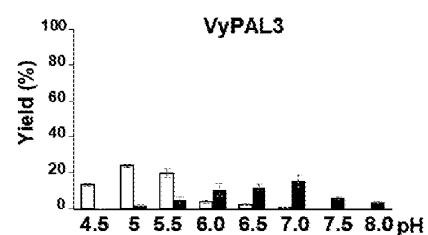
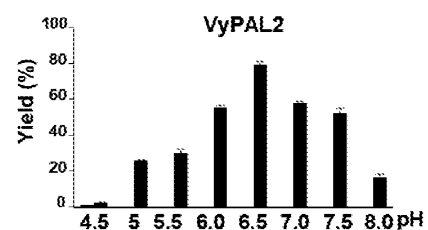
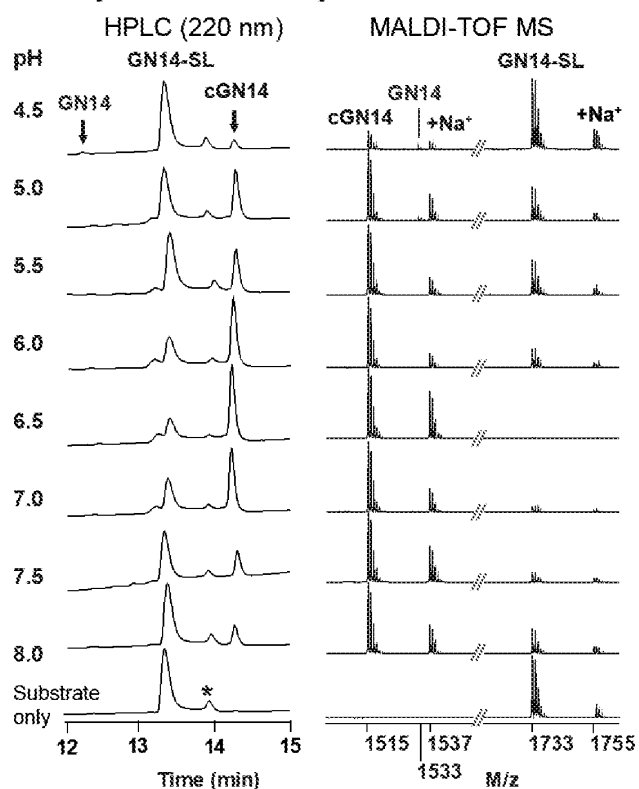
**B VyPAL2-mediated cyclization of GN14-SL**

Fig. 1

2/11

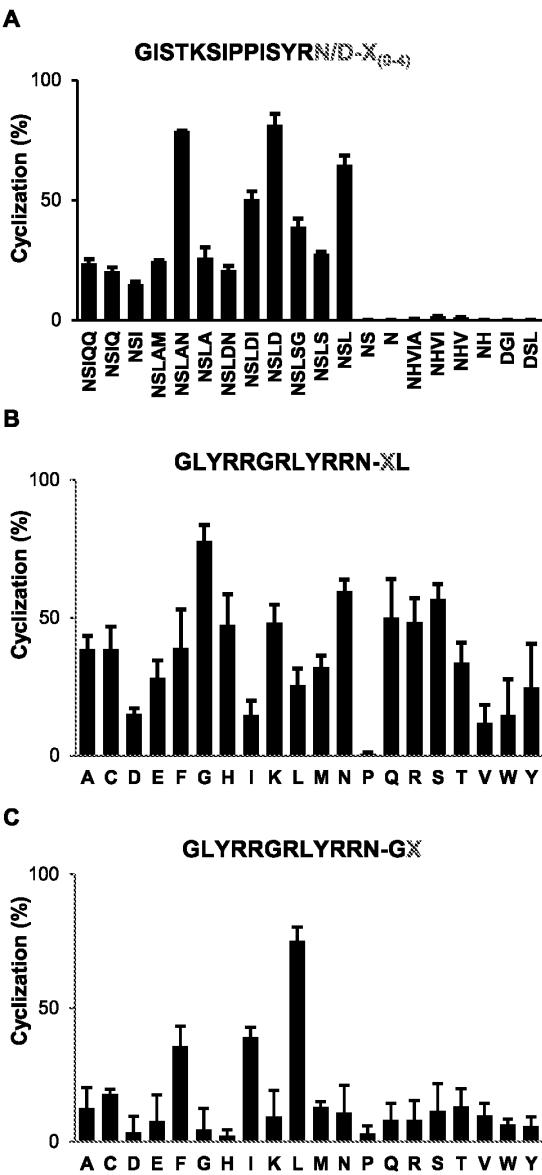


Fig. 2

3/11

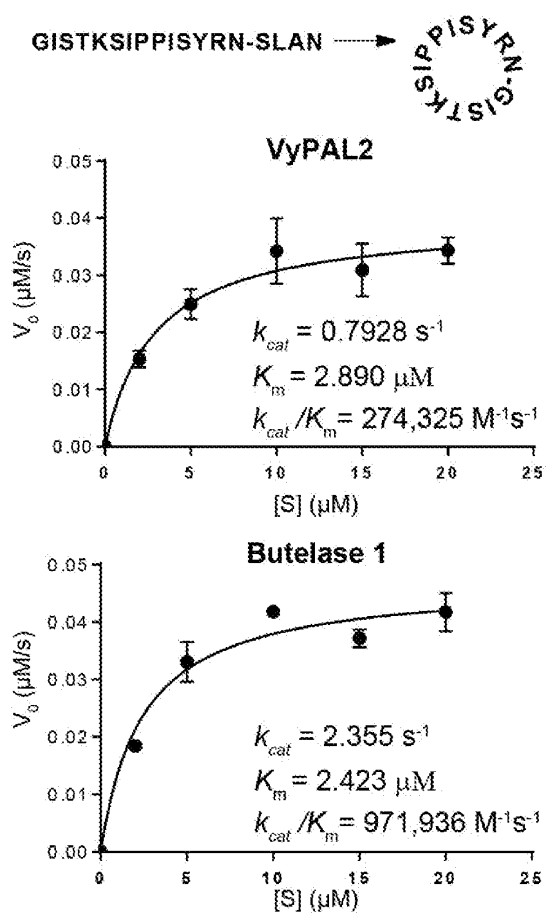


Fig. 3

4/11

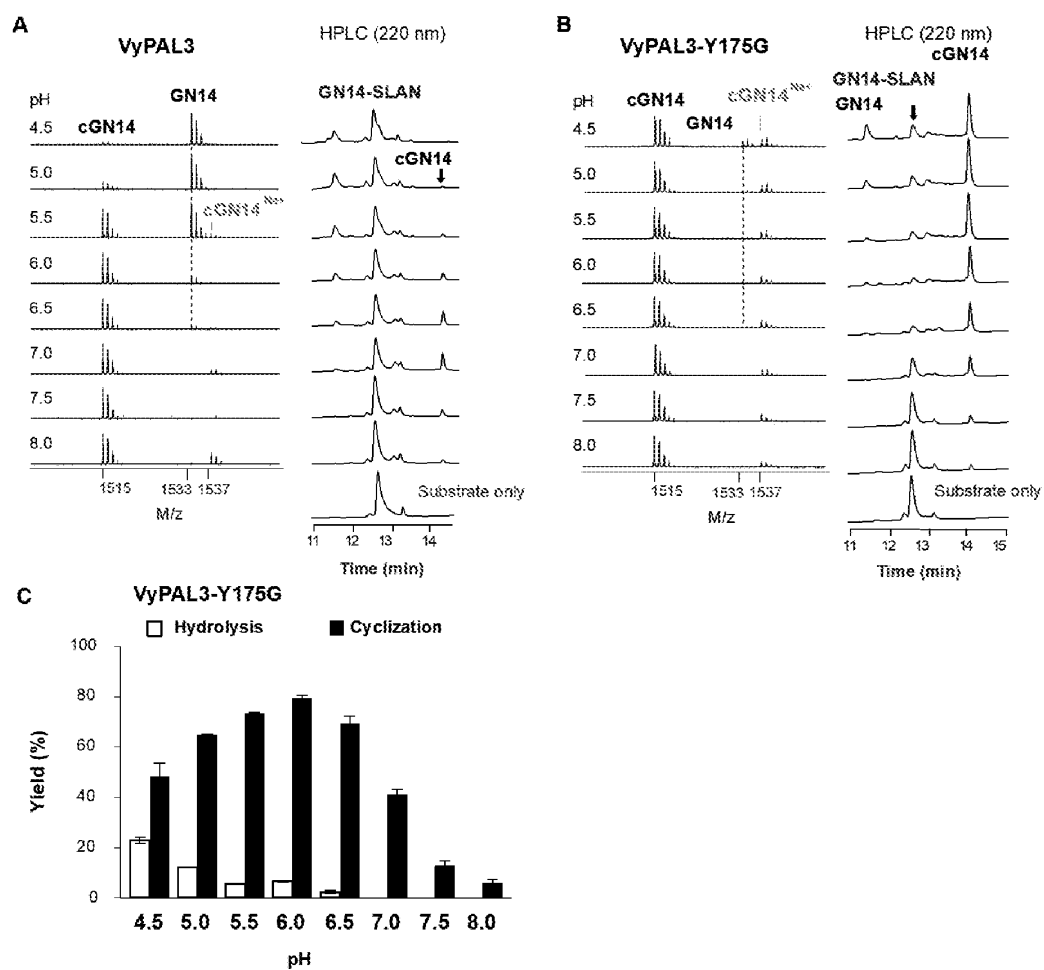


Fig. 4

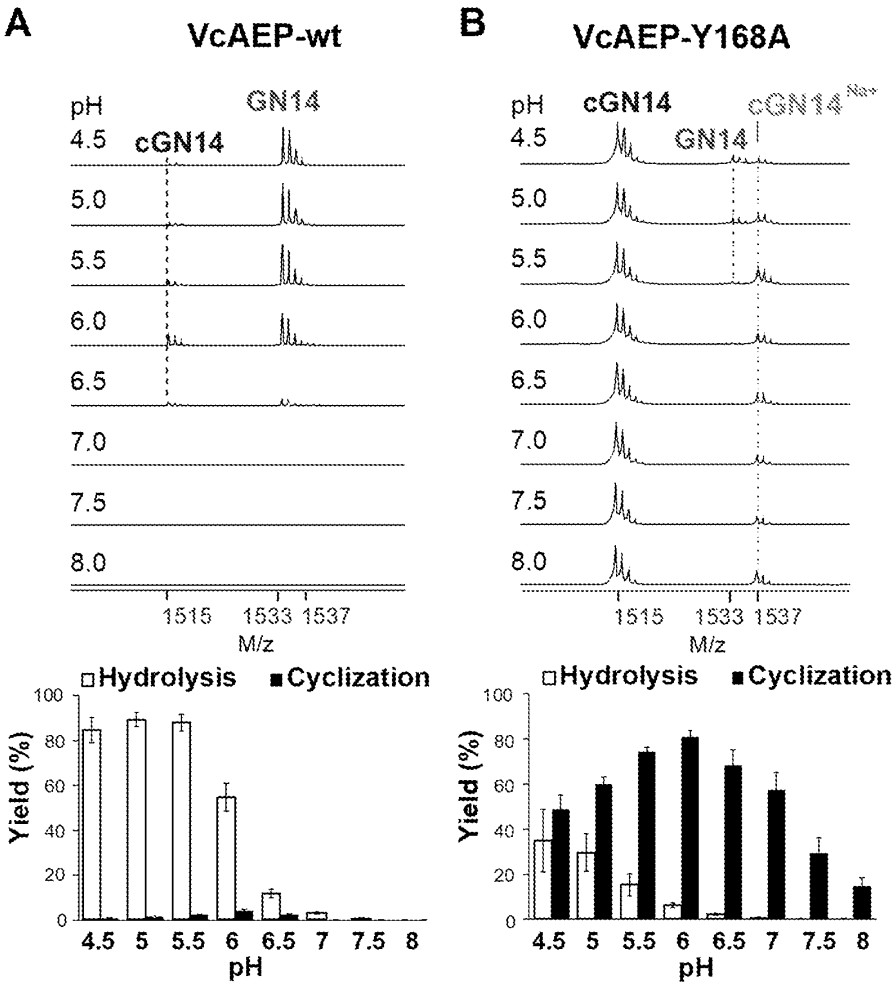


Fig.5

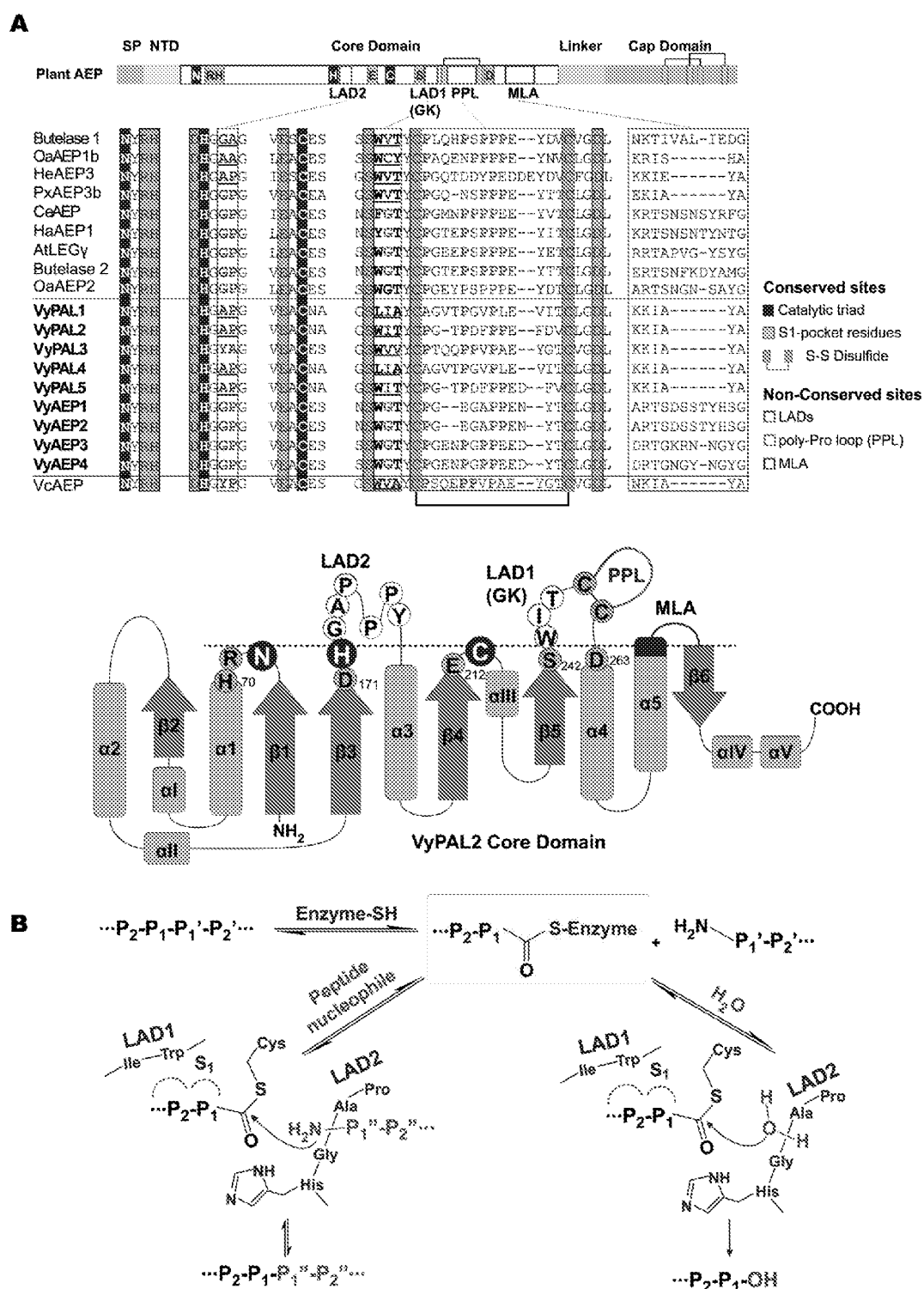


Fig. 6

7/11

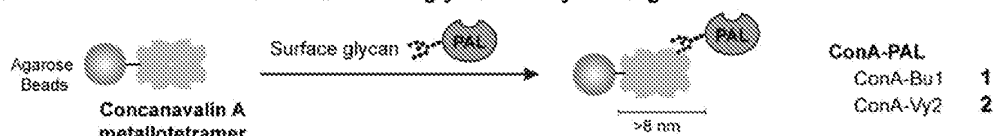
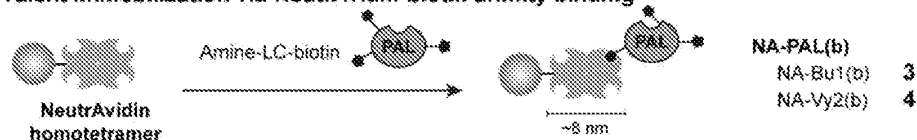
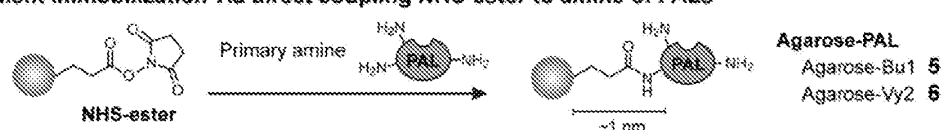
**A Non-covalent immobilization via Lectin-glycan affinity binding****B Non-covalent immobilization via NeutrAvidin-biotin affinity binding****C Covalent immobilization via direct coupling NHS-ester to amine of PALs**

Fig. 7

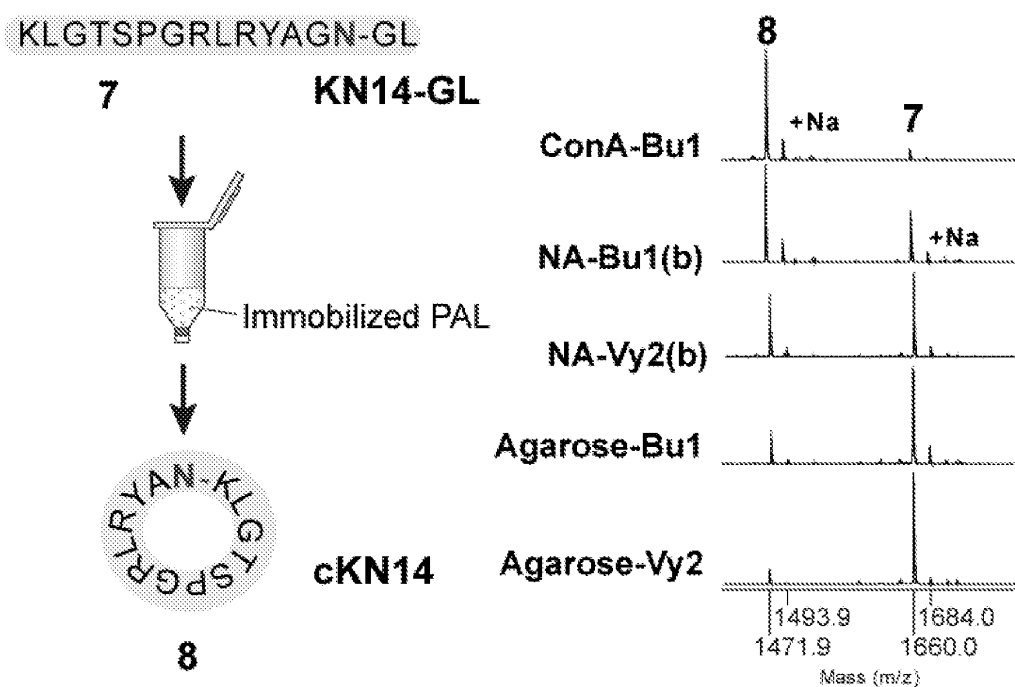


Fig. 8

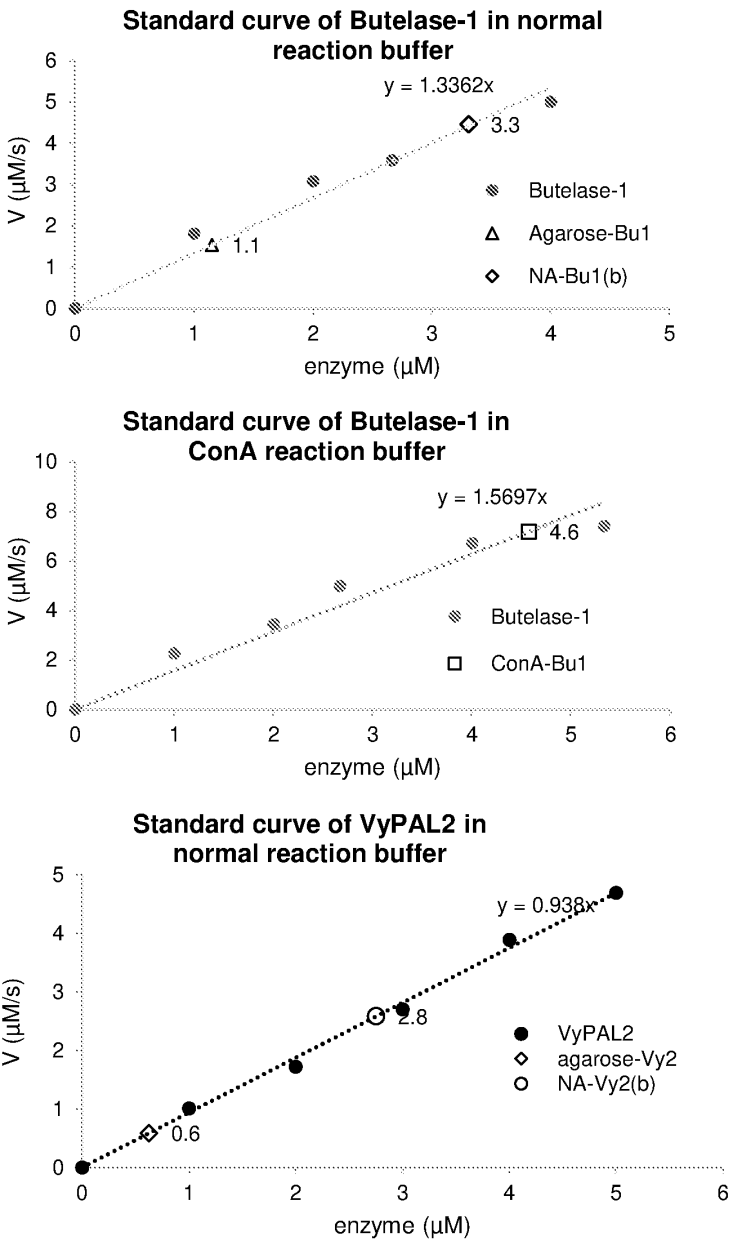


Fig. 9

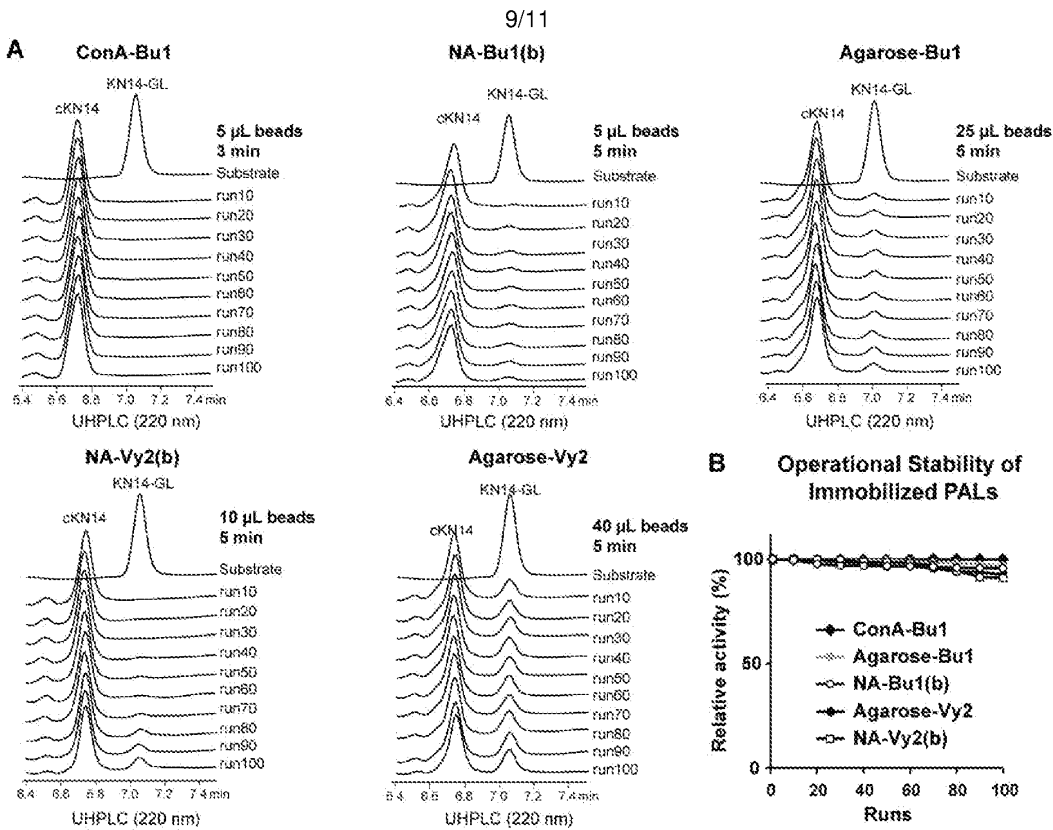


Fig. 10

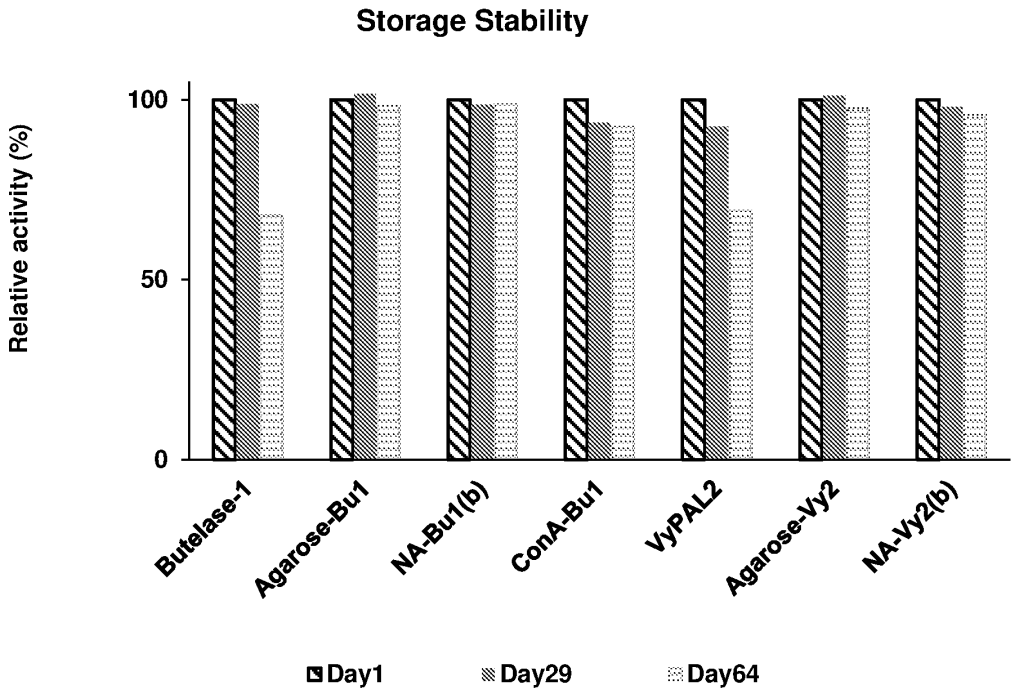


Fig. 11

10/11

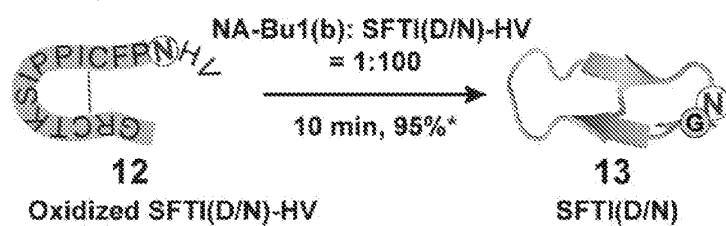
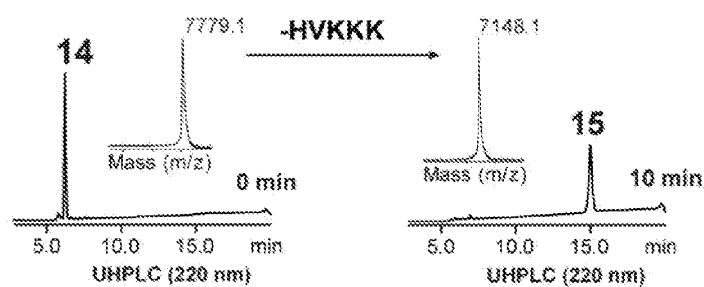
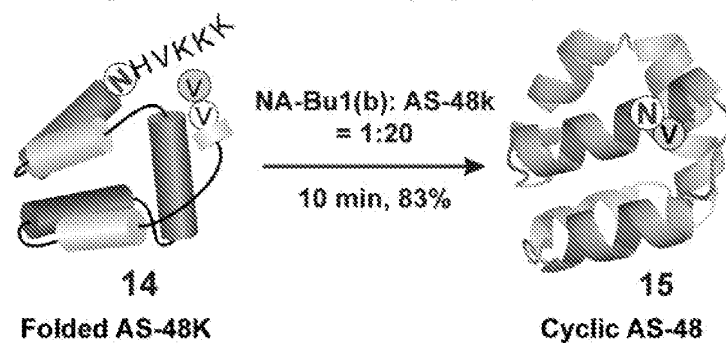
**A Cyclization of peptide with Pro at P2 position****B Cyclization of naturally-cyclic protein**

Fig. 12

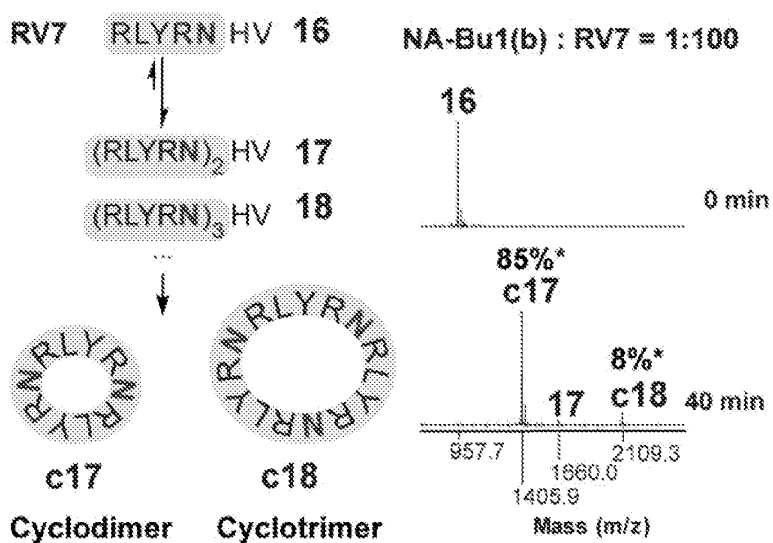


Fig. 13

11/11

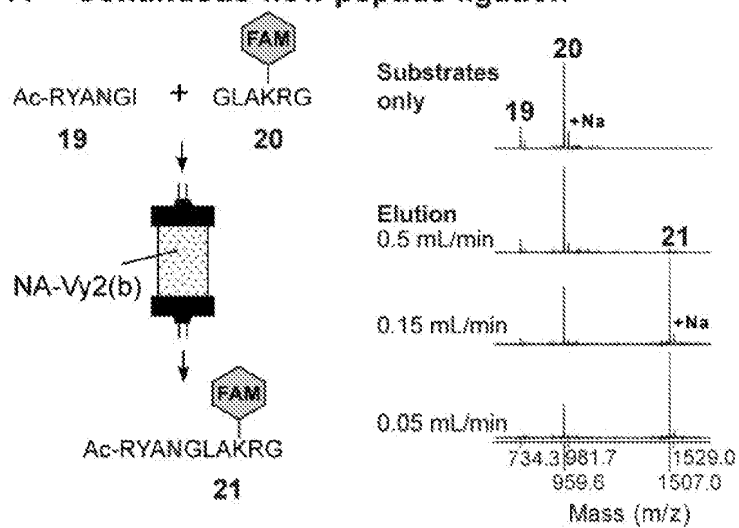
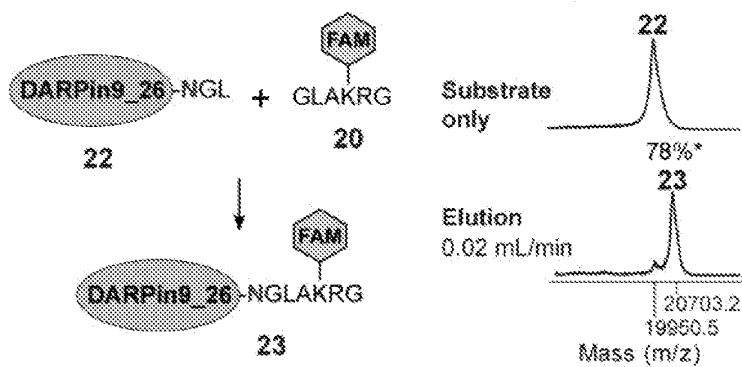
**A Continuous-flow peptide ligation****B Continuous-flow protein labeling**

Fig. 14