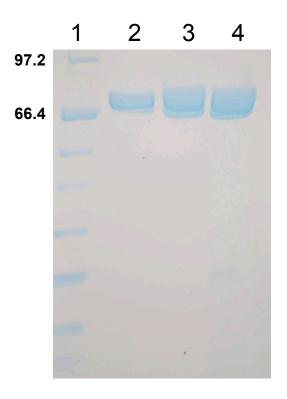
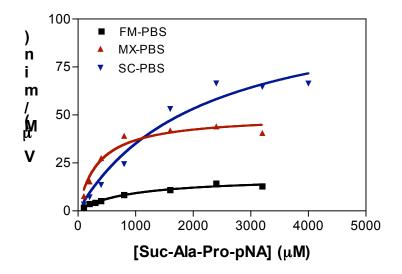
## Supplementary Information

**FIG. S1.** Expression and purification of FM PEP, MX PEP and SC PEP. Lane 1: molecular weight marker labeled with the relevant protein sizes (in kDa); Lane 2: FM PEP; Lane 3: SC PEP; Lane 4: MX PEP. The molecular weights of the three proteins are in the 70-80 kD range.



**FIG. S2.** Reaction kinetics for Suc-Ala-Pro-pNA hydrolysis by FM PEP, MX PEP and SC PEP. Kinetic parameters are summarized in Table 1.



**FIG. S3**. Competitive proteolysis of PQPQLPYPQPQLP and LQLQPFPQPQLPYPQPQ LPYPQPQLPYPQPQF by each PEP. 10  $\mu$ M of the longer peptide and 50  $\mu$ M of the shorter peptide were co-incubated with 0.1  $\mu$ M of FM PEP, MX PEP, SC PEP.

