

Supplementary Figure S1. BOS activity of purified grass pea proteins. Selected ORFs from the grass pea transcriptome were cloned, expressed and purified from *E.coli* cells. The reduction in free L-DAPA concentrations was assayed *in-vitro* as a proxy for BOS activity (**Experimental Procedures**). Clade Ib proteins of the BAHD superfamily are indicted as LsIb-1to10. BOS indicates the wild-type BOS protein. Seq 1-7 protein sequences and annotations are listed in **SI Appendix C**. Var-1 and Var-2 indicate BOS mutants H162Q and D166S, respectively. Data represents the mean ± SD of 2-3 replicate measurements.