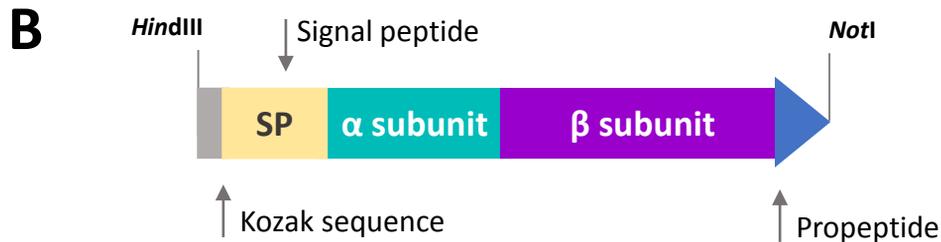


# Figure S1



**C**

**aagc****ttg****aaaaa****atggc****atcctc****aaaactt****ggttg****tcctt****ggcttt****tattc****ttgg****tctt****atta**  
**acctt****ggcaa****actc****cgctacc****gaaactt****ctctta****acatcg****atgg****ttta****acaag****accaat**  
**ttgat****cttaca****aggtg****acgctat****cg****tttctt****caaac****ggaattt****gcag****ttgt****ctaca****ac**  
**agttac****gattcc****atgag****tagag****ccttct****attcag****ctcca****attcaaa****tcag****agatag****tact**  
**act****ggta****acg****tcg****cttct****tttg****acact****aactt****caca****atga****acatc****aga****actca****tag****acaa**  
**gcta****atcag****cag****ttgg****tttgg****at****ttt****g****ttt****tag****tcc****cag****ttc****ag****cctg****ag****tcca****agga**  
**gata****cag****tcacc****g****ttg****aat****ttg****acact****ttct****tg****tca****aga****at****ttct****at****cg****atg****tt****aa****caac**  
**aac****gac****atta****ag****tctg****ttc****ctt****ggg****acg****ttc****ac****g****atta****tg****ac****g****gtca****aaa****c****g****ctg****ag****g****tt**  
**aga****atc****acct****aca****attc****cag****tact****a****agg****tct****tc****g****cag****ttt****ct****tt****g****tt****ga****acc****ctt****ct****aca**  
**gg****aaa****atca****aat****gat****gtct****cc****acc****act****gt****tg****aat****tg****g****aga****agga****ag****tt****ac****g****act****gg****g****tc**  
**ag****ag****ttg****g****ttt****ct****cc****g****ca****aca****ag****tg****g****ag****c****ct****at****c****ag****tg****g****t****ct****ta****c****g****aa****ac****cc****at****g****at****g****tt**  
**tt****at****ct****tt****g****g****tc****at****tt****ct****c****aaa****att****c****atta****acc****ata****agg****acc****aga****ag****tc****ag****ag****aga****ag****t**  
**aac****at****cg****ttt****g****aa****ta****ag****at****ttt****g****ta****ag****cg****g****cc****g****c**

Restriction sites *HindIII* (5') and *NotI* (3') in black bold;

Kozak sequence underlined;

Signal peptide in **yellow bold**;  $\alpha$ -subunit in **green bold**;  $\beta$ -subunit in **purple bold**;

and propeptide in **blue bold**.

**Figure S1: Schematic representations of Pinto- $\alpha$ AI gene, synthetic gene and its nucleotide sequence.** (A) Native  $\alpha$ AI gene from cv. Pinto comprising signal peptide (SP),  $\alpha$ - and  $\beta$ - subunits and the propeptide sequences; (B) the synthetic  $\alpha$ AI-OPT gene, optimised for expression in yeast, including a Kozak consensus sequence and flanked by *HindIII* and *NotI* restriction sites. (C) Nucleotide sequence of  $\alpha$ AI-OPT gene.