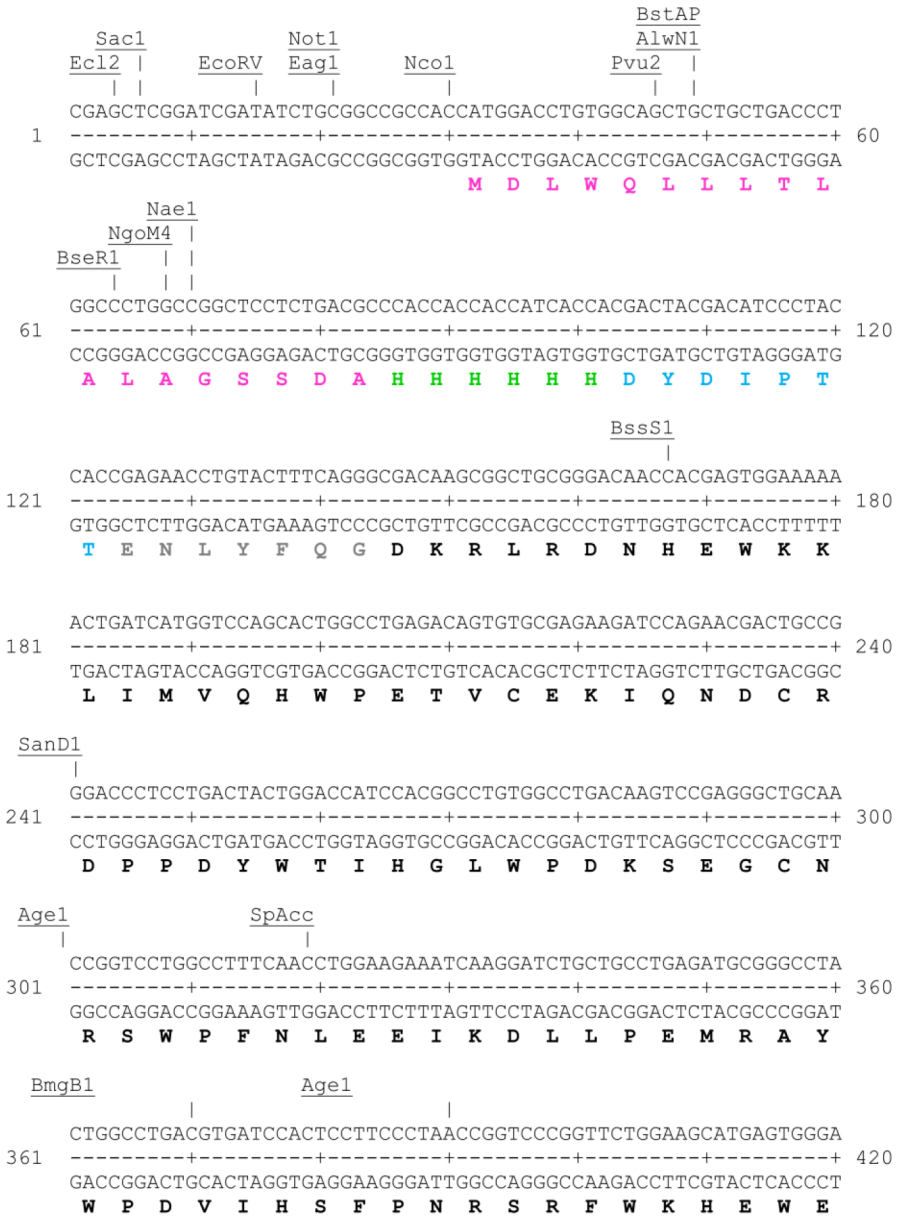
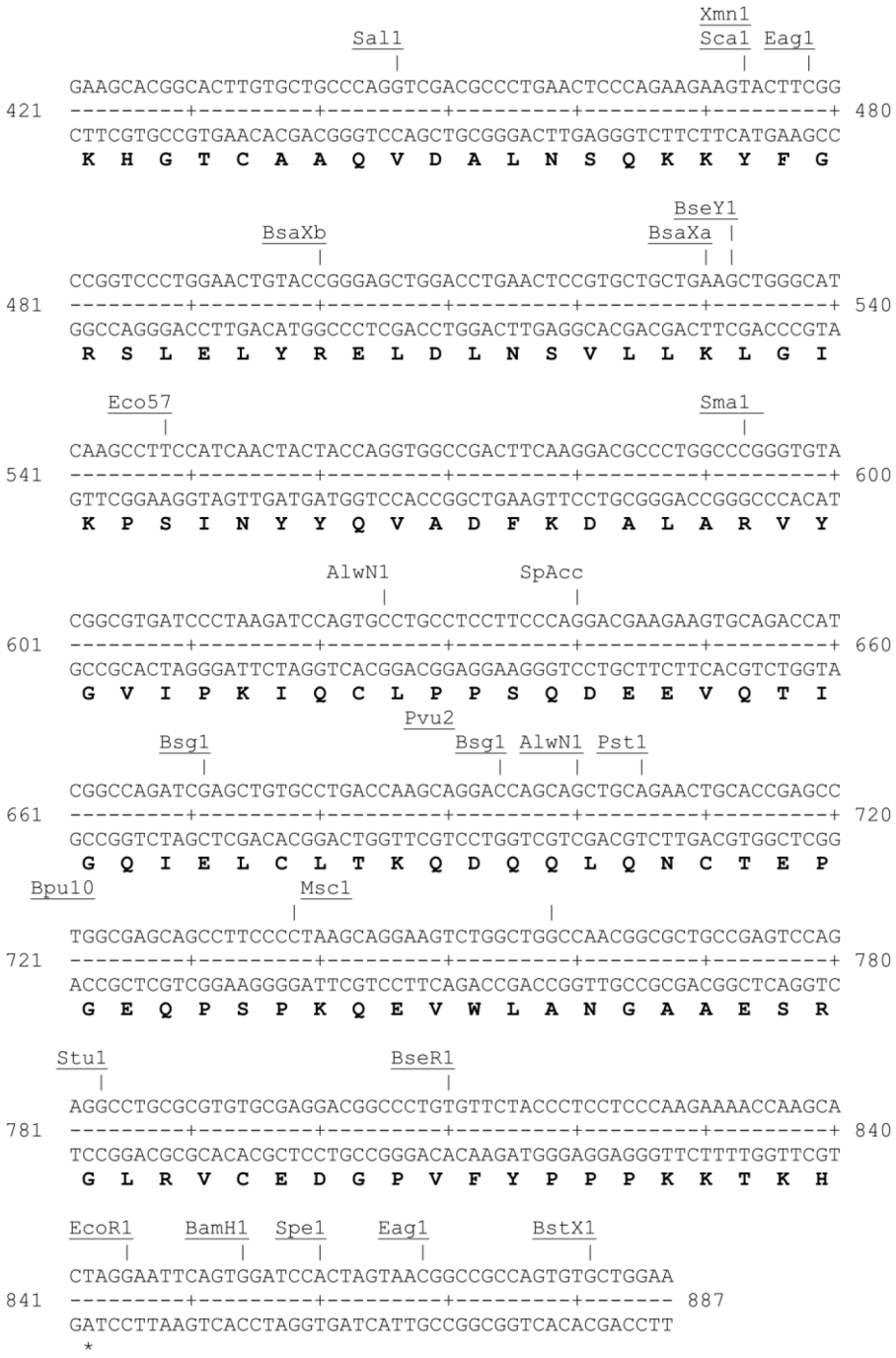
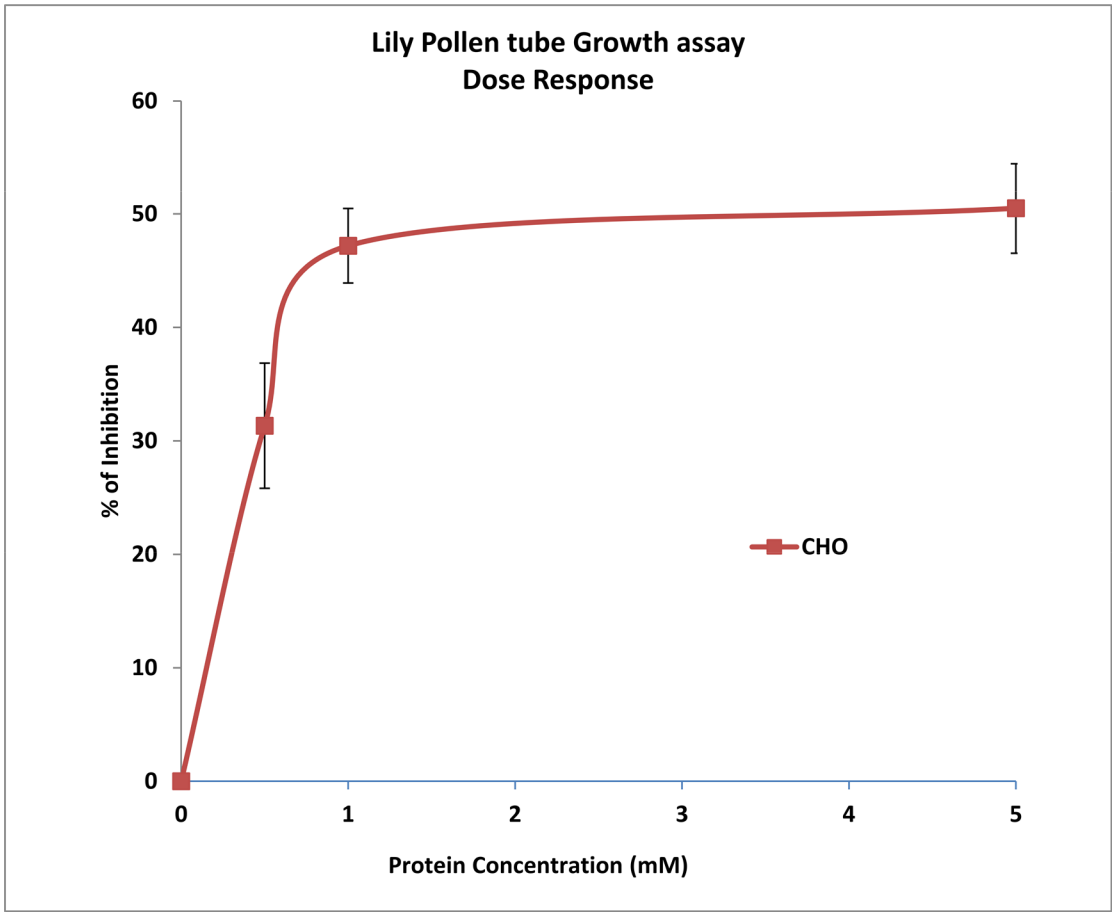
SUPPLEMENTARY FIGURES



(*Continued*)



Supplementary Figure S1 (*Continued*): Restriction map. The human recombinant RNASET2 construct. The amino acid sequence is in bold. The human growth hormone receptor signal peptide (magenta), 6 x His tag (green), spacer region (blue) and TEV protease cleavage site (grey) were situated upstream to the mature RNASET2 sequence. The c-DNA sequence was optimized for expression in CHO. The open reading frame ends with a stop codon (asterisk).



Supplementary Figure S2: Lily pollen tube results.

Lilly pollen tube growth (PTG) assay

Pollen tube growth was assessed as previously described (4), with slight modifications. Lilium longiflorum var. white heaven flowers were allowed to open in the lab. Anthers were excised and brought to complete dehiscence and pollen release for 24-48 h at room temperature. The pollen was suspended at a concentration of about 40 mg per ml culture medium (7% sucrose (w/v), 1.27 mM $Ca(NO_3)_2$, 0.16 mM H_2BO_3, 1 mM KNO_3 and 3 mM KH_2PO_4 in water) (5), vigorously stirred by vortex and centrifuged for 2 min at 13,400 rpm at room temperature, to release the lipid phase from pollen grains. The cell pellet was suspended in 1 ml culture medium, in a fresh 1.5 ml Eppendorff tube. The same procedure was repeated three more times. Cells were counted and suspended in culture medium at a density of 25,000 cells/ml. Pollen was germinated in 100 µl culture medium containing 1 mM hrRNASET2 or PBS (as control) and incubated for 1-2 h at 25°C in the dark, to maximum 500 mm. The pollen tubes were fixed and stained by adding 100 ml Alexander stain (20 mg malachite green, 100 mg acid fuchsin, 5 gr phenol, 2 ml lactic acid, 20 ml ethanol, 40 ml glycerol, 50 ml water) (6) to each tube and gently mixing. Pollen tube length were imaged under a microscope (Leica DMi 3000M, Germany) equipped with a Digital Sight DS-Fi1 camera (Nikon, Japan) and analyzed using NIS-Elements Br software (Nikon, Japan). N=3 and at least 100 pollen tubes were measured in each determination.