Supplemental Information

Supplemental figures

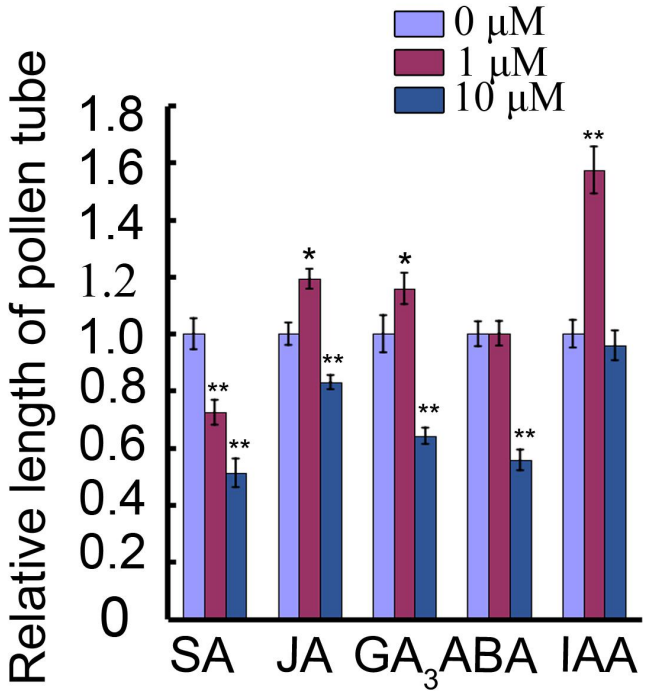

Figure S1 Effects of different phytohormones (SA, JA, GA3, ABA, IAA) on A*rabidopsis* pollen tube in vitro. noted that SA and ABA inhibited pollen tube growth with SA at 1 μM and ABA at 10 μM while IAA, JA, GA3 promoted it at 1μM. All the phytohormones reduced length at 10μM except IAA. Data are presented as mean ± S.E.M.. n>150. *p<0.05, **p<0.01 (Dunnett test).

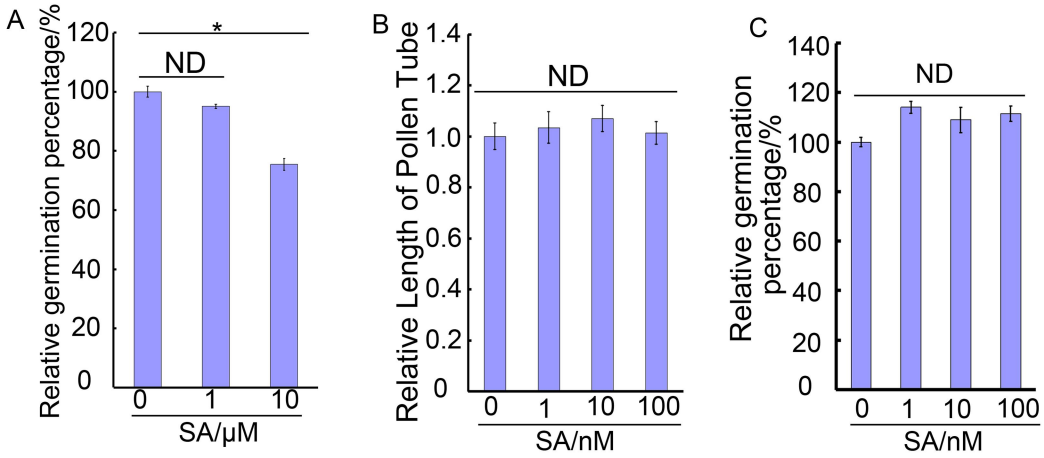

Figure S2. Demonstration of the effects of wide range concentration of SA on pollen tube length(B), germination and(A,C). Error bars showing S.E.M.. n >100, *p<0.05, (Dunnett test), ND means no difference.

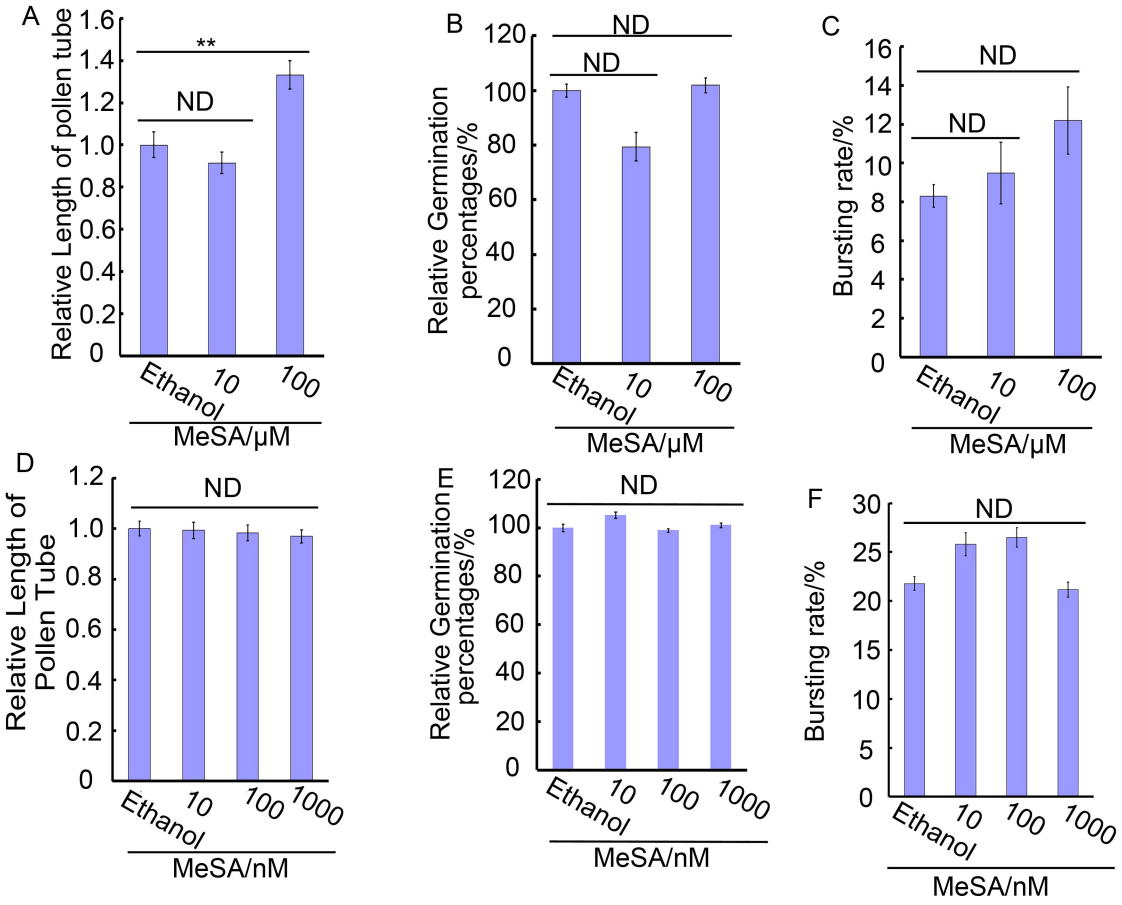

Figure S3. Demonstration of the effects of wide range concentration of MeSA on pollen tube length(A,D), germination (B,E) and bursting rate(C,F). Error bars showing as S.E.M.. n >100, **p<0.01 (Dunnett test), ND means no difference..

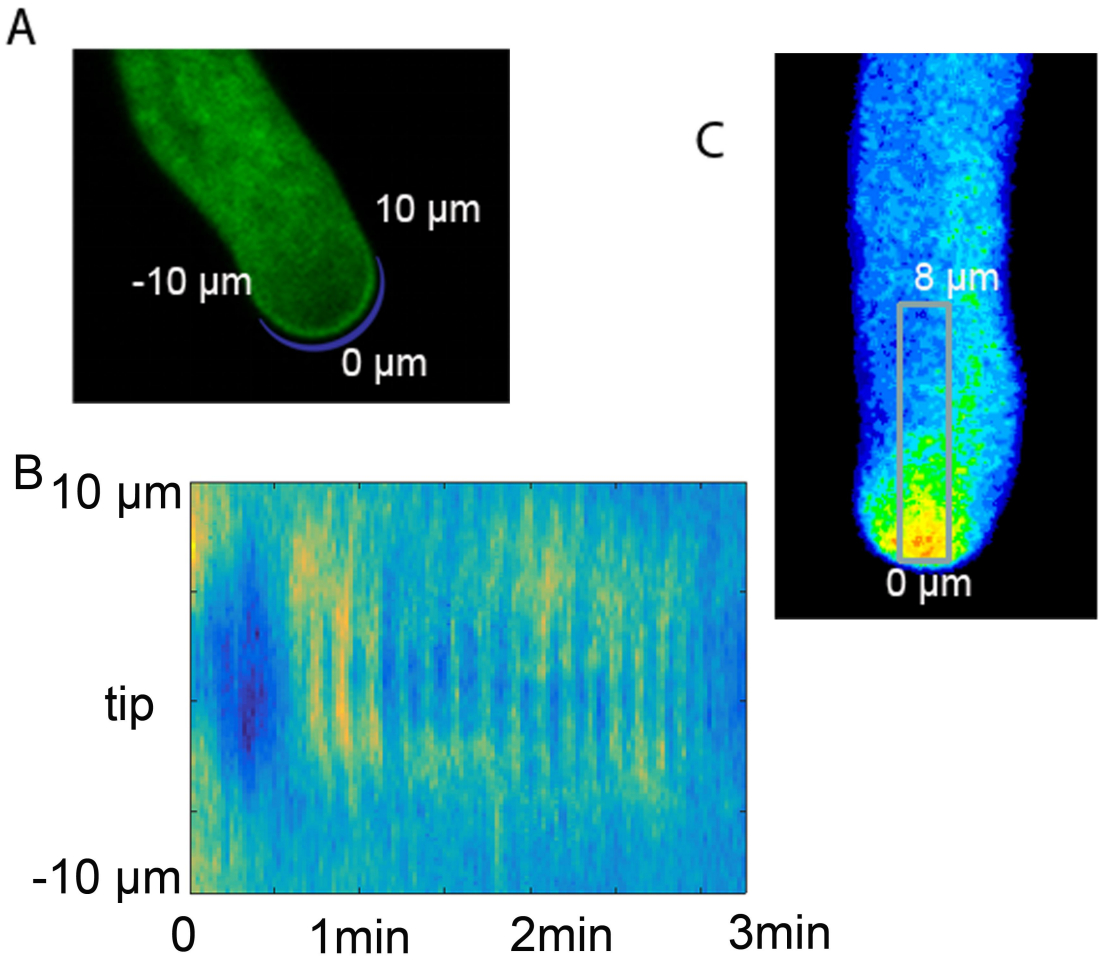

Figure S4. (A) Representative images showing the measurement of CRIB4-GFP localizatio on PM of pollen tube tip. (B) Heat map of CRIB4-GFP on PM of pollen tube by time.(C) Representative images showing the measurement of GFP-REN1 accumulated in vesicle.

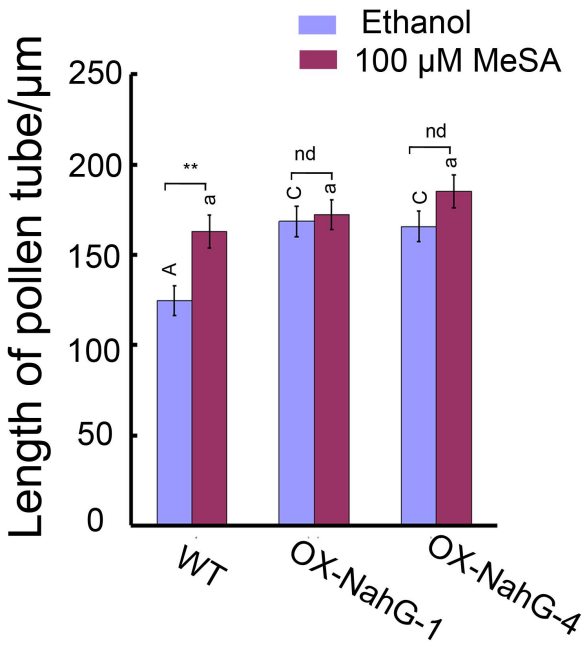

Figure S5. Pollen tube length of wild type or Lat52::NahG over express lines treated with 100 μM MeSA with Ethanol as control for 3 hours. The result showing that pollen tube growth promotion of MeSA was inhibited by over express SA hydroxylase NahG. **p<0.01 was calculated by Two ways ANOVA with Tukey test (ND means no difference. A,C represent comparison from different genotypes with 0 μM SA treatment, a,c mean comparison from different genotypes with 20 μM SA treatment). Error bars showing S.E.M.. n >100,