

**Supplementary Information for  
Decoupling of CVD-grown epitaxial graphene using NaCl intercalation**

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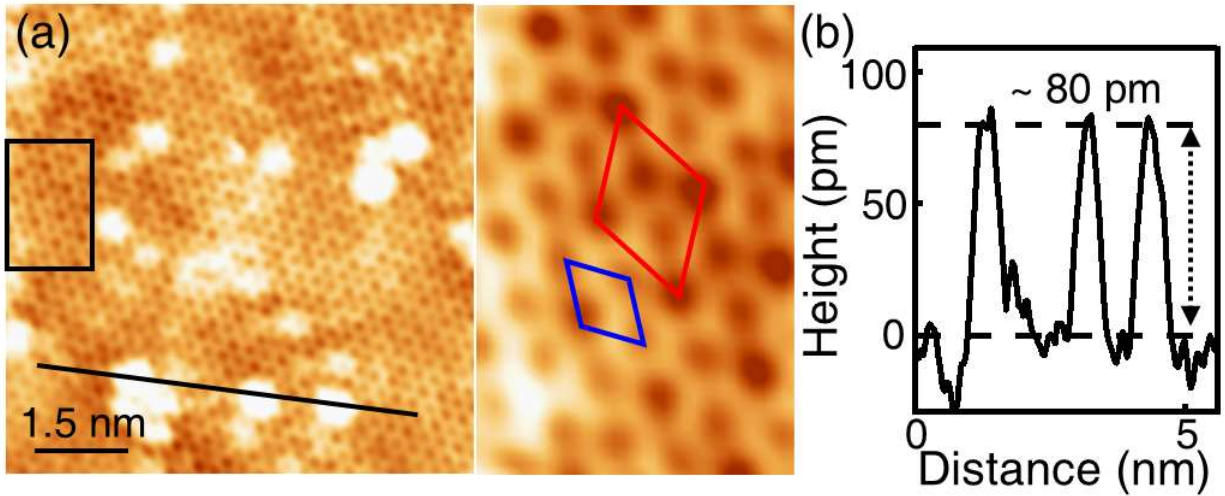
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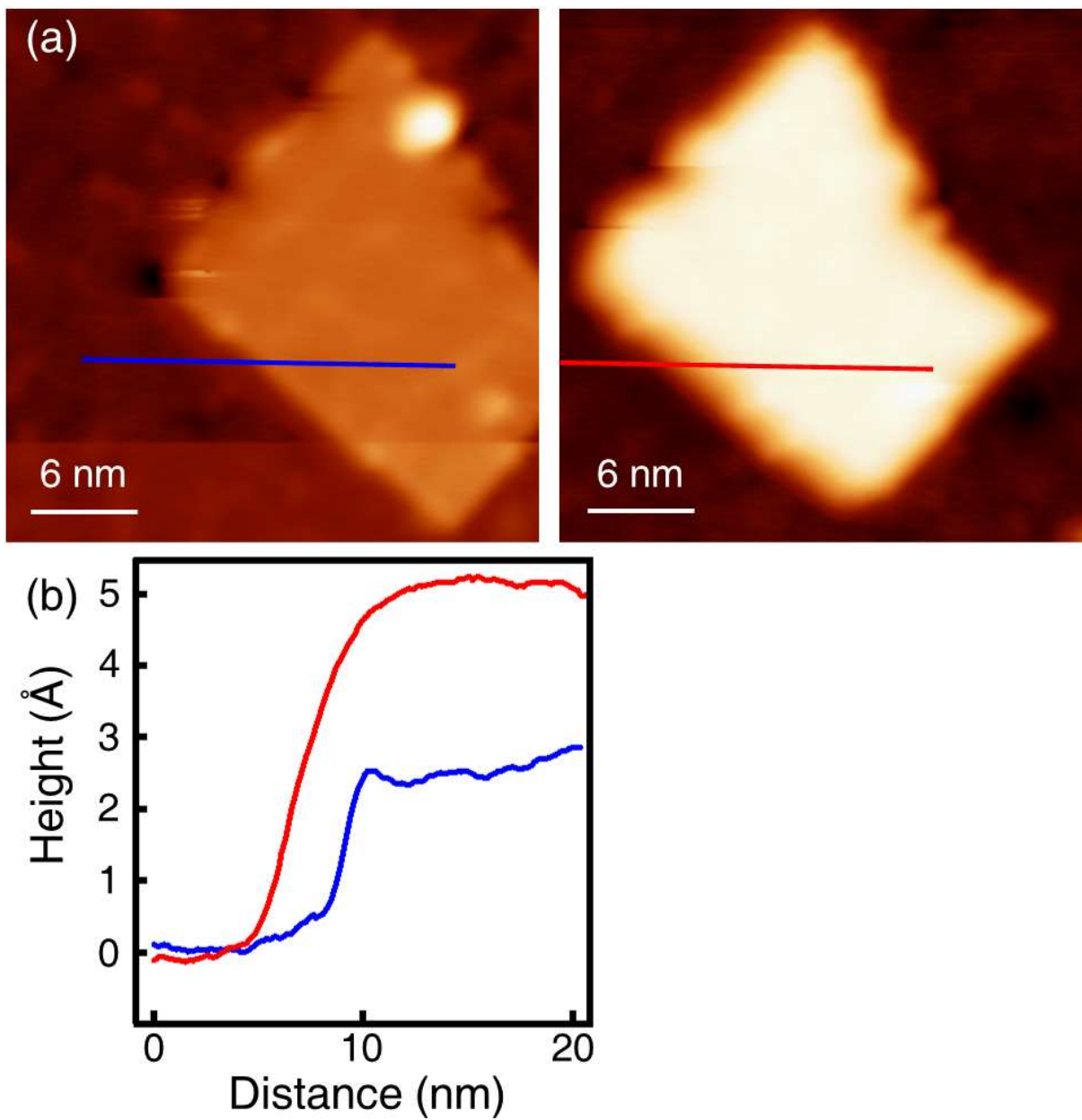
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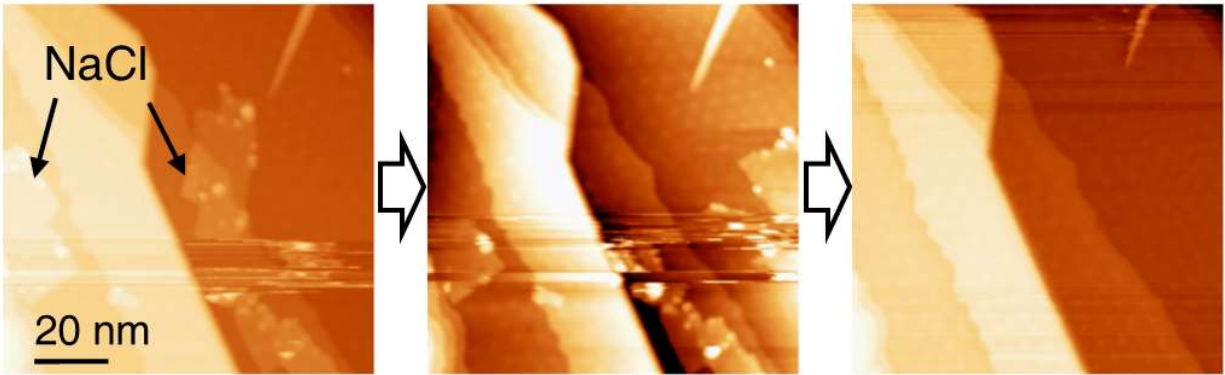
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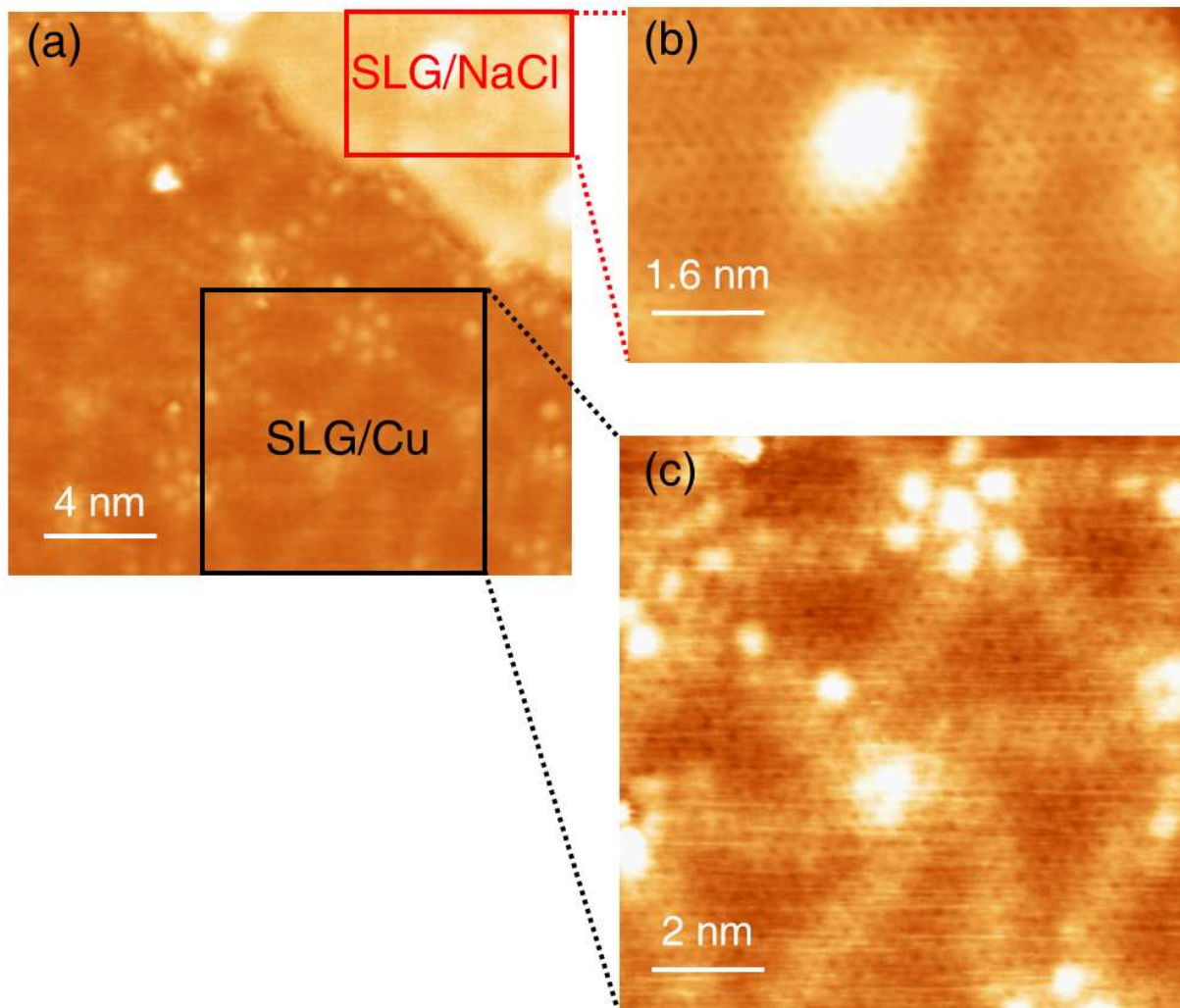
**Fig. S1.** (a) Scanning tunnelling microscopy (STM) images of the single-layer graphene (SLG) on Cu(111) ( $V_s = 50$  mV,  $I_t = 700$  pA). A magnified topography (right) indicated by the black rectangle in the left image. Red and blue diamonds represent the graphene lattice and **R3** supercell, respectively. (b) Height profile along the line marked in (a) represents the height of (bright) Cu vacancies.



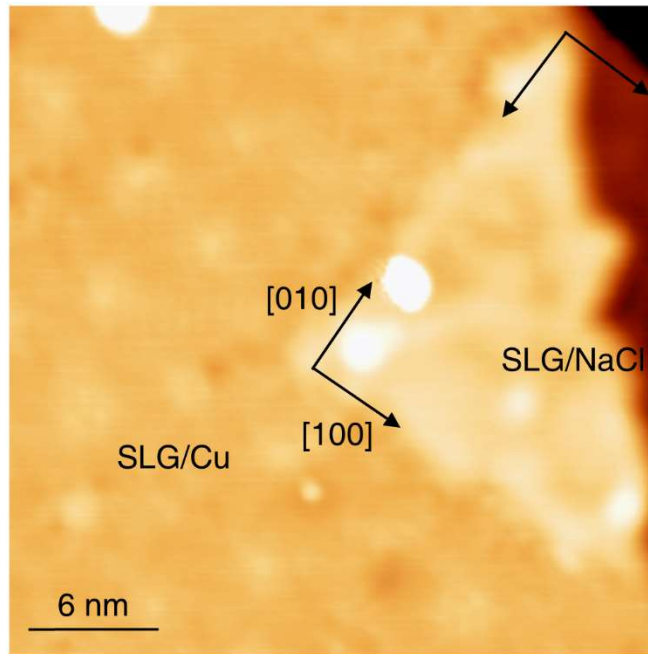
**Fig. S2.** (a) STM images of 2 ML NaCl grown on SLG/Cu imaged at the sample bias of 3.0 (left) and 4.0 V (right) ( $I_t = 50$  pA). (b) Height profiles along the blue and red lines in (a).



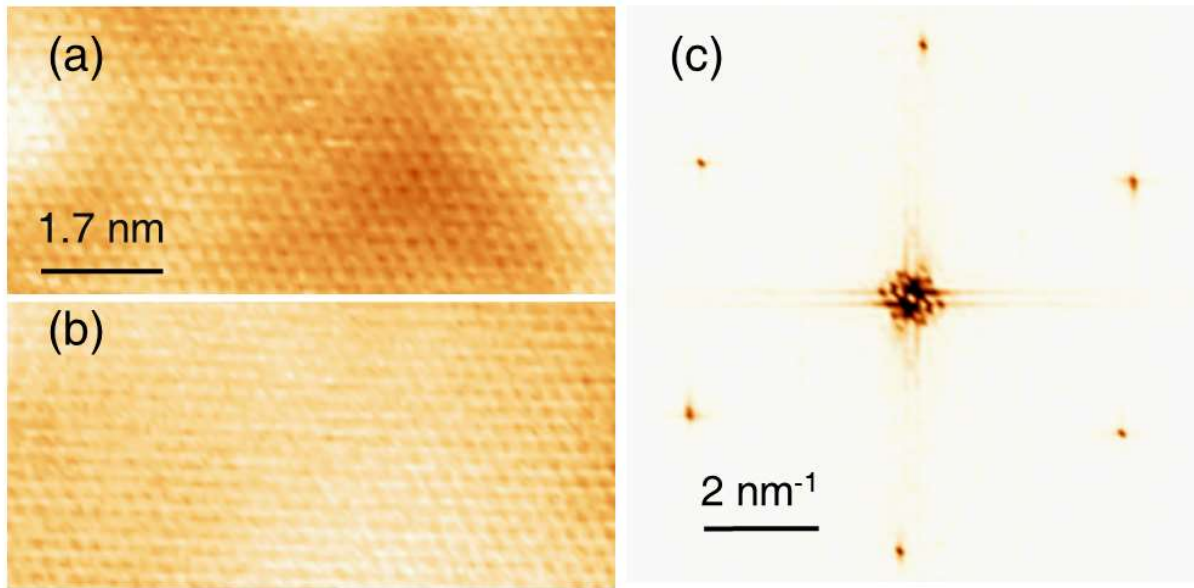
**Fig. S3.** Sequential STM images ( $V_s = 2.0$  V,  $I_t = 50$  pA) exhibiting (001)-oriented NaCl islands that were moved and cracked by the STM tip.



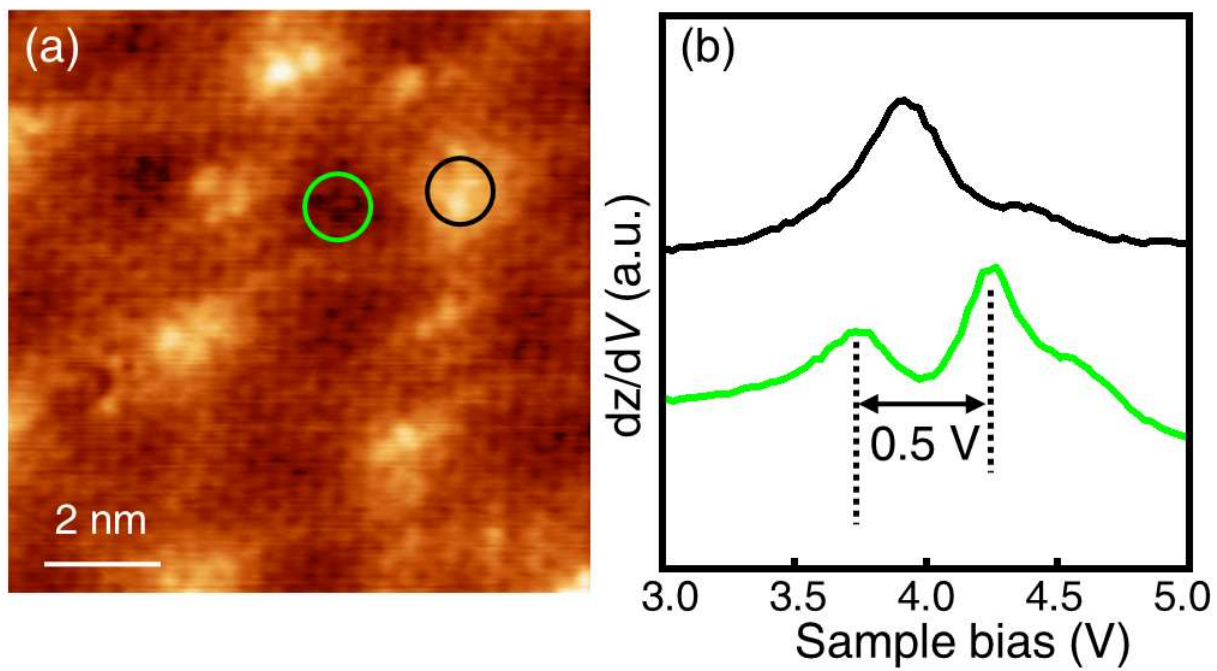
**Fig. S4.** (a) STM image of NaCl-intercalated graphene and SLG/Cu ( $V_s = -0.5$  V,  $I_t = 500$  pA). Zoomed-in topographies of (b) SLG/NaCl ( $V_s = -0.5$  V,  $I_t = 500$  pA) and (c) SLG/Cu ( $V_s = 0.4$  V,  $I_t = 500$  pA) indicated by the red and black rectangle in (a), respectively.



**Fig. S5.** STM image of an intercalated  $\langle 100 \rangle$ -oriented NaCl island ( $V_s = 2.0$  V,  $I_t = 50$  pA).



**Fig. S6.** (a) Atommally-resolved STM topography of NaCl-intercalated graphene representing the graphene lattice ( $V_s = 0.4$  V,  $I_t = 500$  pA). (b) Simultaneously acquired  $dI/dV$  map. (c) FT of the STM image (a) revealing a honeycomb lattice without Kekulé distortion.



**Fig. S7.** (a) STM topography showing the honeycomb lattice and bright Cu vacancies ( $V_s = 0.1$  V,  $I_t = 500$  pA). (b) FER spectra obtained from Cu vacancy (black) and from SLG near the Cu vacancy showing the peak splitting (green).