

# **Insights into the structure and dynamics of measles virus nucleocapsids by $^1\text{H}$ -detected solid-state NMR**

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## **Supporting material**

### **1. TEM**

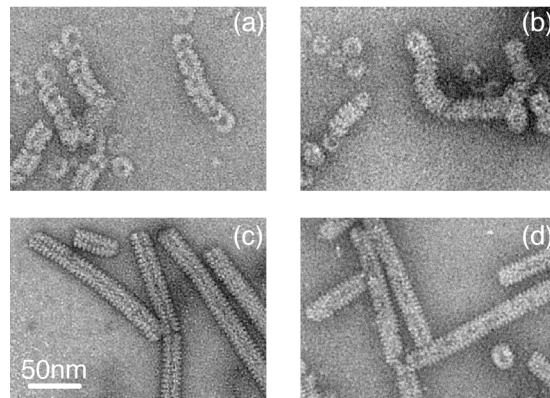
Figure S1. TEM images of intact and cleaved MeV nucleocapsids, before and after solid-state NMR

### **2. Solid-state NMR spectroscopy**

Figure S2. Pulse sequences of solid-state NMR experiments

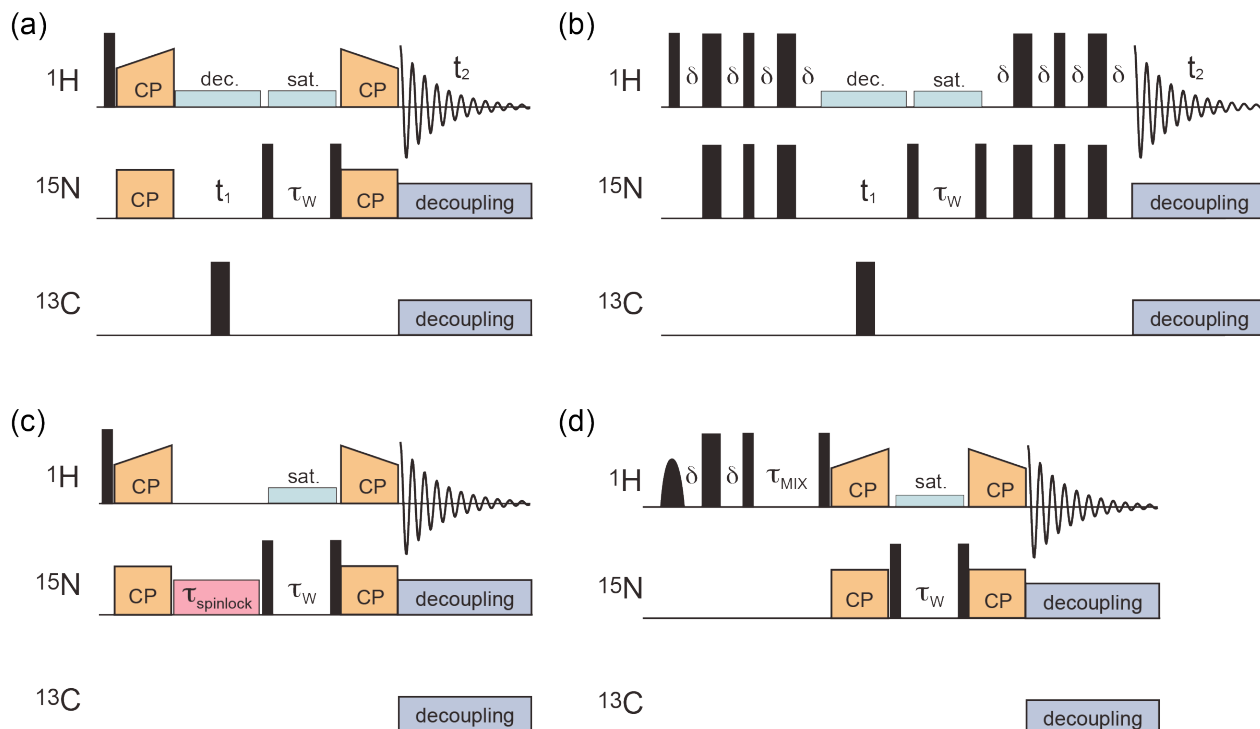
Figure S3. Comparison of CP-PDS correlation spectra acquired on intact and trypsin-cleaved MeV  
nucleocapsids

## 1. TEM

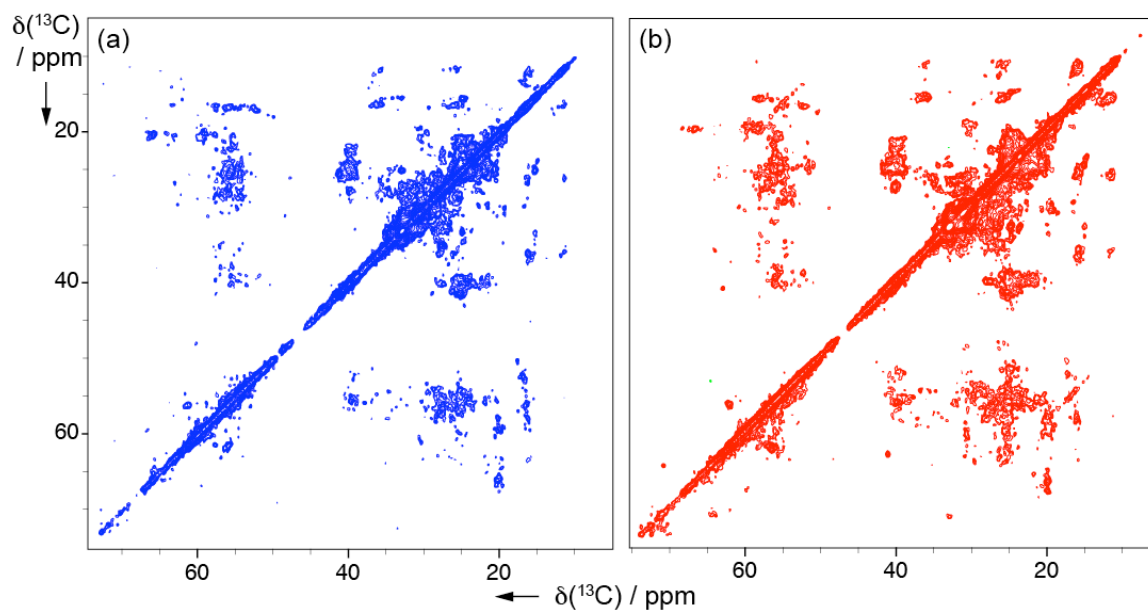


**Figure S1:** TEM images of intact (a-b) and cleaved (c-d) MeV nucleocapsids, before (a,c) and after (b,d) solid-state NMR.

## 2. Solid-state NMR spectroscopy



**Figure S2:** Pulse sequences of  $^1\text{H}$ -detected solid-state NMR experiments. (a-b) HN correlations, in which magnetization transfer steps are accomplished using dipolar- (CP-HSQC, a) or J-couplings (J-HSQC, b), where the delay  $\tau$  is set to  $1/4J$  (2.7 ms for  $J_{\text{HN}}=93$  Hz); (c) bulk  $^{15}\text{N}$   $T_{1\rho}$ ; (d) water-edited CP-HSQC experiment. Narrow and broad black rectangles indicate  $90^\circ$  and  $180^\circ$  pulses respectively, the bell shape represents a band-selective water excitation pulse.



**Figure S3:** Comparison of  $^{13}\text{C}$ - $^{13}\text{C}$  CP-PDSD correlation spectra (with 100 ms mixing time) acquired on intact (a) and trypsin-cleaved (b) MeV nucleocapsids, at pH7. Experiments were run on a 1 GHz spectrometer with a triple-channel 1.3 mm probe under 10 kHz MAS.