## **Supplementary Figures and Tables for:**

'How baculovirus polyhedra fit square pegs into round holes to robustly package viruses',

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I. Stuart

## **Supplementary Figure 1 Amino acid sequence conservation**

Amino acid sequence conservation for the (**A**) alphaBVs and (**B**) betaBVs. Conserved residues drawn in red boxes, similar residues in red type. The secondary structure assignment for AcMNPV is drawn above the alphaBV alignment. Conserved cysteine is highlighted in yellow. The sequences were aligned with ClustalW (Chenna *et al*, 2003) and visualized using ESPript (Gouet *et al*, 1999). A full list of the accession numbers for the virus genomes and virus abbreviations can be found in (Jehle *et al*, 2006).

## A Alpha Baculoviruses η1 000= 50 **→**20020 βA′ βВ AcMNPV 1 10 MPDYS . YRPTIG MYDYS . YRPTIG MYTRYS . YRPSIG 20 70 GAVEKNAKRKEHPAEH GSVEKNAKRKEHLLEH GSVEKNAKRKEHLLEH GSVEKNAKRKEHLLEH GSVEKNAKRKEHLLEH GSVEKNAKRKEHLLEH GSVEKNAKRKEHLLEH GSVEKNAKRKEHLLEH GSVEKNAKRREHLLEH GSVEKNAKRREHLEH GSVEKNAKRREHLEH GSVEKNAKRKEHLEH GSVEKNAKRKEHLEEH GAVEKNAKRKEHLEEH GAVEKNAKRKEHLEEH GAVEKNAKRKEHLEEH GAVEKNAKREKHLEEH GAVEKNAKREHLEEH GAVEKNAKREHLEEH GAVEKNAKREHLEEH GAVEKNAKREHLEEH GAVEKNAKREHLEEH AcMNPV CfMNPV CfDEFMNPV ROMNPV BmNPV EppoNPV OpMNPV AdhoNPV AgreNPV ChChNPV HearNPVC1 HzSNPV MaconPVA MaconPVB LdMNPV SeMNPV SpltNPV TniSNPV $\beta$ C 00000000000000000 BE BD AcMNPV 100 120 140 160 AcMNPV CfMNPV CfDEFMNPV ROMNPV BmNPV EppoNPV OpMNPV AdhoNPV AgreNPV ChChNPV HearNPVG4 HearNPVC1 HzSNPV MacoNPVA MacoNPVB LdMNPV SeMNPV SpltNPV TniSNPV βG βн α3 η2 200000 2000 200 βI βJ AcMNPV 170 210 220 230 240 180 SNNEY MNNEY MNNEY MNNEY MNNEY MNNEY SNNEY SNNEY AcMNPV CfMNPV CfDEFMNPV ROMNPV BmNPV EppoNPV OpMNPV AdhoNPV AgreNPV ChChNPV HearNPVG4 HearNPVC1 HzSNPV MacoNPVA MacoNPVB LdMNPV SeMNPV SpltNPV TniSNPV В **Beta Baculoviruses** 10 20 8 0 VRRKKDR VRRKKDR VRRKKDR VRRKKEL VRRKKEL VRRKKDR VRHKEEL CrleGV CpGV PhopGV PlxyGV AdorGV XecnGV AgseGV CrleGV CpGV PhopGV PlxyGV AdorGV XecnGV AgseGV

FFDDVI FFDDVI FFDDVI FFEDNI FFDDVI

CrleGV CpGV PhopGV

PlxyGV AdorGV XecnGV AgseGV NN HN NN DN