

Expression of Ac-PK2 protein from AcMNPV improved the progeny virus production via regulation of energy metabolism and protein synthesis

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Fig. S1

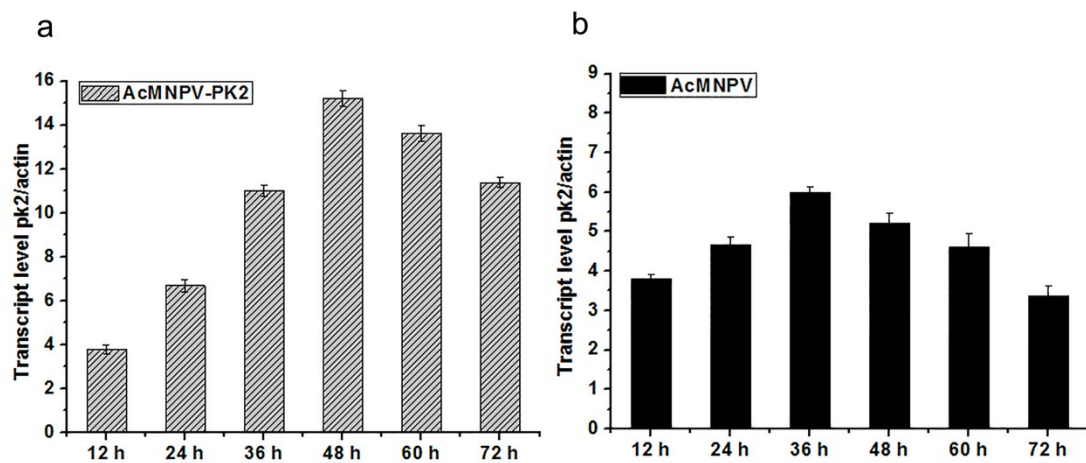


Fig. S1 Transcription expression analysis of *pk2* gene. (a) Transcription level analysis of *pk2* gene in AcMNPV-infected group. (b) Transcription level analysis of *pk2* gene in AcMNPV-PK2-EGFP-infected group. We chose *β -actin* gene as reference gene.

Calculated method was $2^{-\Delta \Delta CT}$.

Fig S2

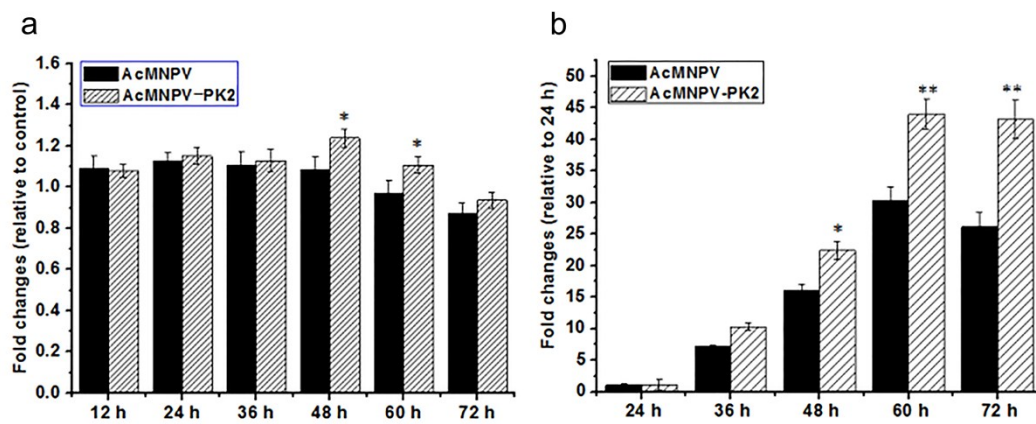


Fig S2 Protein expression analysis of infected Sf9 cells. (a) The content of total

protein analysis of Sf9 cells infected with AcMNPV or AcMNPV-PK2-EGFP. (b)
The content of total protein analysis of Sf9 cells co-infected with AcMNPV-Renilla-
RFP and AcMNPV-PK2-EGFP or AcMNPV. The relative activity of renilla
luciferase in two groups was shown. Statistical significance was determined using
Student' s t-test. *, $P < 0.05$; **, $P < 0.05$.

Fig S3

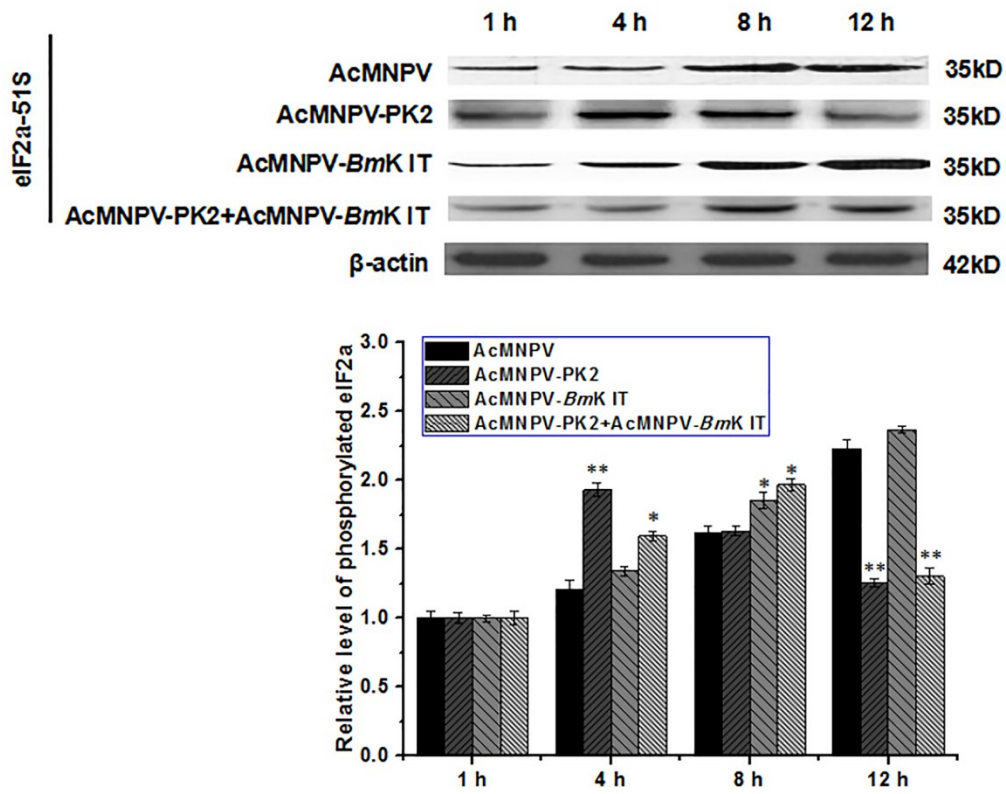


Fig S3 Western blot analysis of eIF2α phosphorylation in midgut tissue of *Spodoptera exigua* larvae infected with AcMNPV, AcMNPV-PK2-EGFP, AcMNPV-BmK IT, and AcMNPV-PK2-EGFP+AcMNPV-BmK IT. The histogram was the relative expression quantity of eIF2α phosphorylation. (*, $P < 0.05$; **, $P < 0.01$).

Table S1

Table S1 Sequence of primers used for PCR.

Primer name	Sequence
pk2 F	5'-ATACCCGGGATGAAACCCGAACAATT-3'
pk2 R	5'-ATCCTCGAGCTAGTTTTTTAGAACACGTTG-3'
Renilla F	5'-ATACCCGGGATGACTTCGAAAGTTTATGA-3'
Renilla R	5' -ATCCTCGAGTTGTTTCATTTTTGAGAACTCG-3'
pk2 F (qPCR)	5'-CTTTCAACAGCCATTCAGCA-3'
pk2 R (qPCR)	5'-CGGCAAGTTTATCCCAAGG-3'
β -actin F	5'-AAGGCTAACCGTGAGAAGATGAC-3'
β -actin R	5'-GATTGGGACAGTGTGGGAGAC-3'