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Supplementary Information for

Rhinovirus induces an anabolic reprogramming in host cell metabolism essential for viral replication

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Datasets S1

www.pnas.org/cgi/doi/10.1073/pnas.1800525115

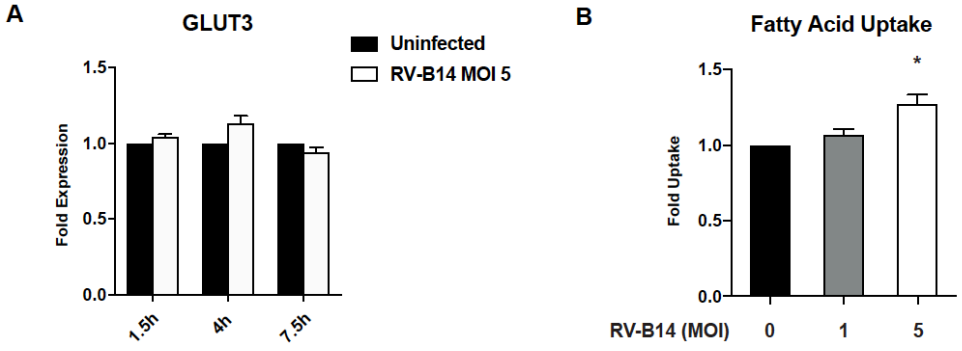

Fig. S1. Impact of RV on GLUT3 expression and fatty acid uptake. Panel A) shows shows the mean ± SEM of GLUT3 expression in the 4 experiments in fibroblasts. Panel B) shows the uptake of fluorescently labeled fatty acids (C16-Bodipy®) in RV infected HeLa cells. Mean ± SEM of the 4 experiments is depicted. *$p<0.05$ calculated by paired t-test of the raw MFI data.

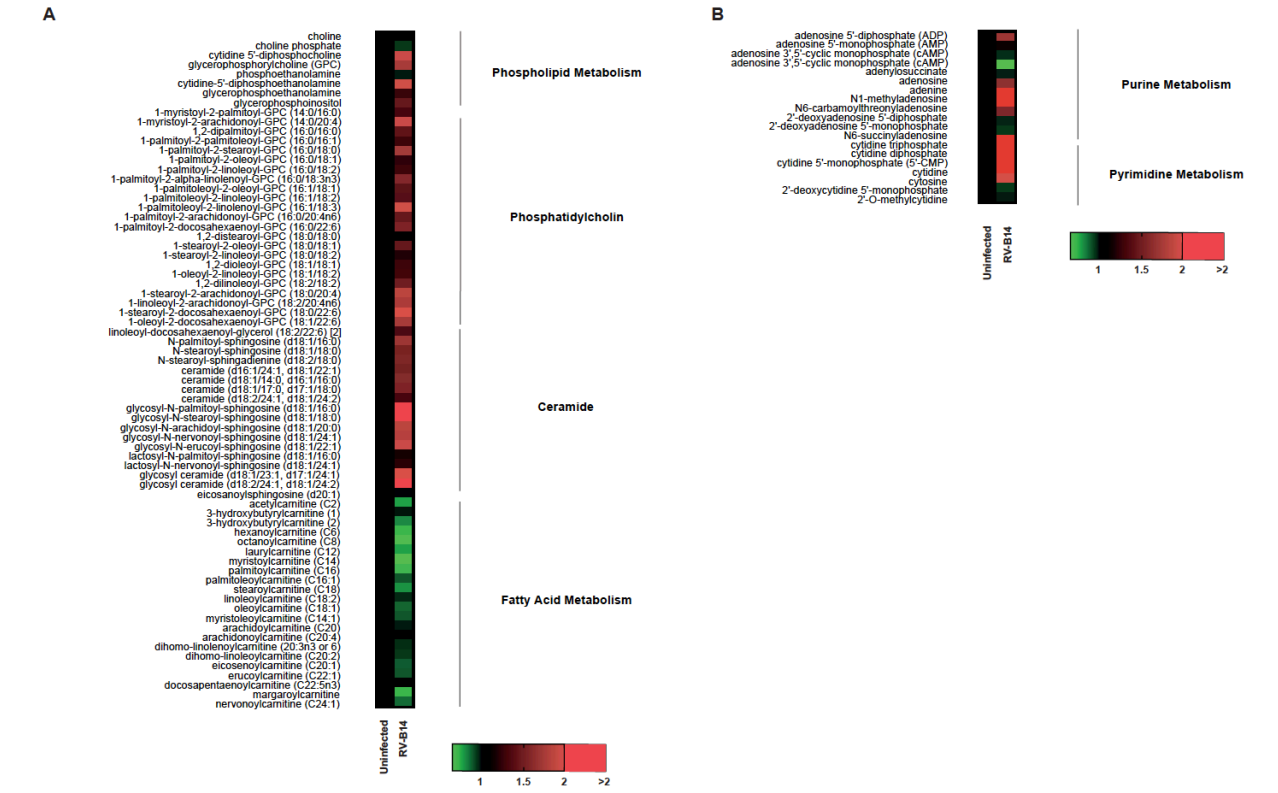

Fig. S2. Rhinovirus induces an anabolic reprogramming of host cell metabolism. Metabolomic analysis of HeLa cells infected with RV-B14 (MOI 3.5) at 7 h post infection. Panel A) shows the effect on lipid metabolism and Panel B) on nucleotide metabolism.

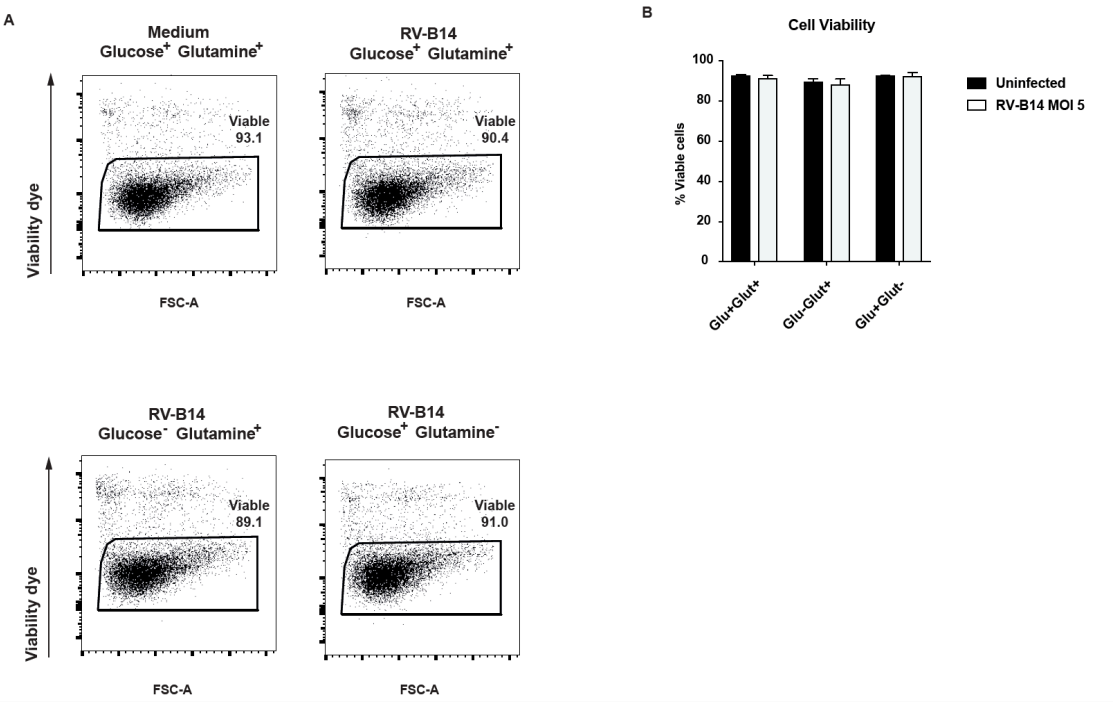

Fig. S3. Viability of glucose or glutamine-deprived HeLa cells. Cells were infected as described in the materials and methods section. Panel A) shows a representative 7-AAD staining. Panel B) shows a summary of 2 experiments.±SD.

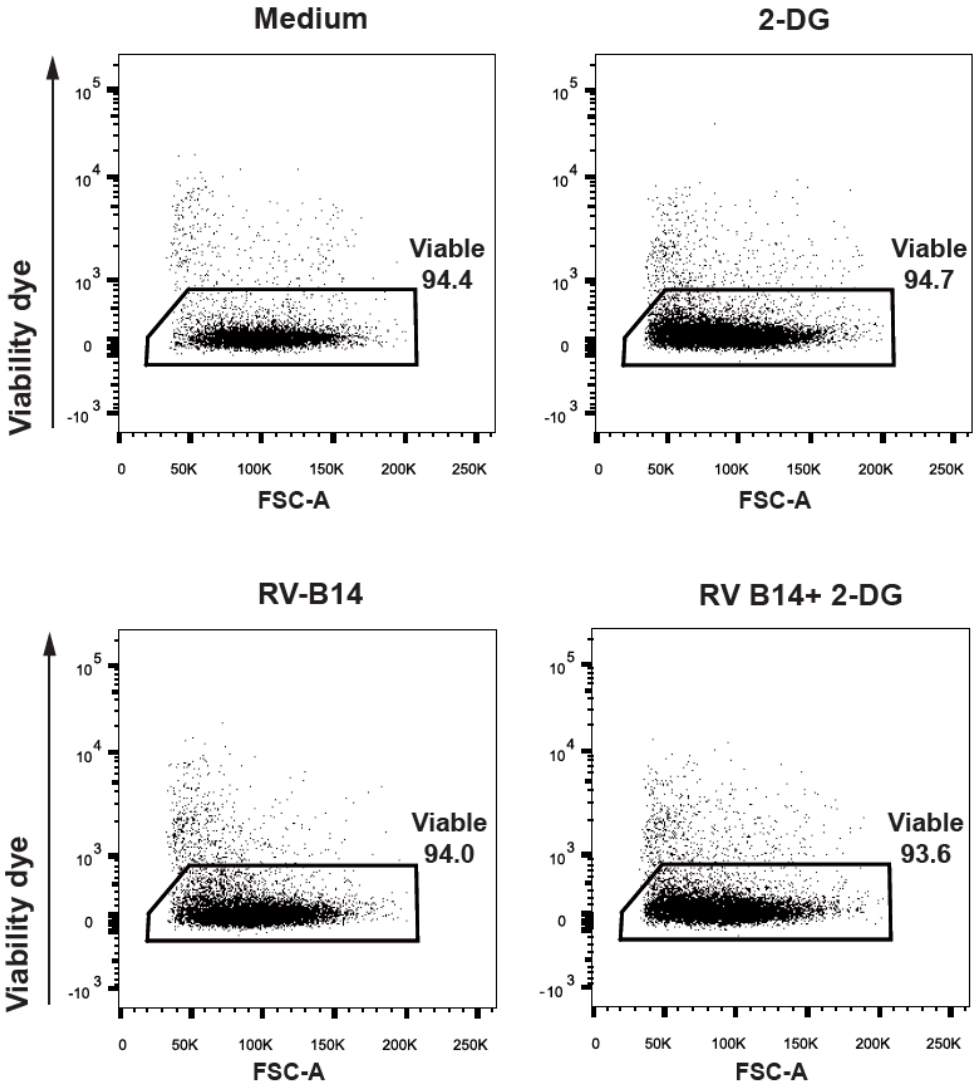

Fig. S4. Viability of 2-DG treated HeLa cells. Cells were infected as described in the materials and methods section. Panel A) shows a representative fixable viability dye staining. A representative of 2 similar experiments is shown.

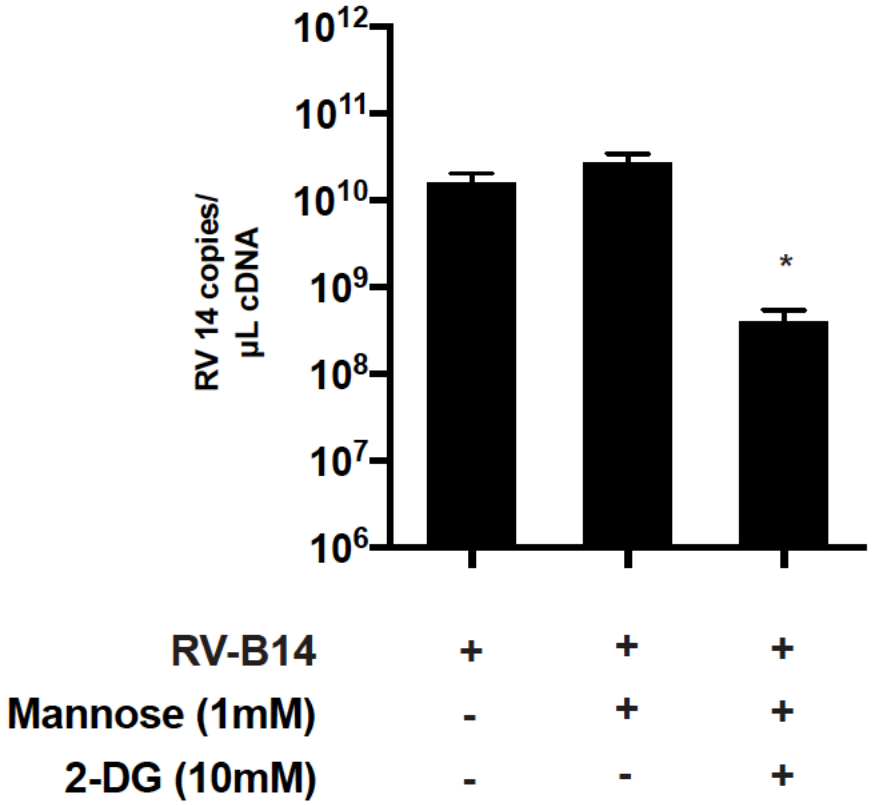

Fig. S5. Impact of mannose on 2-DG treatment. HeLa cells were infected as described in the materials and methods section. After 1h of infection, cells were washed and incubated with the indicated compounds for additional 6h prior to analysis.

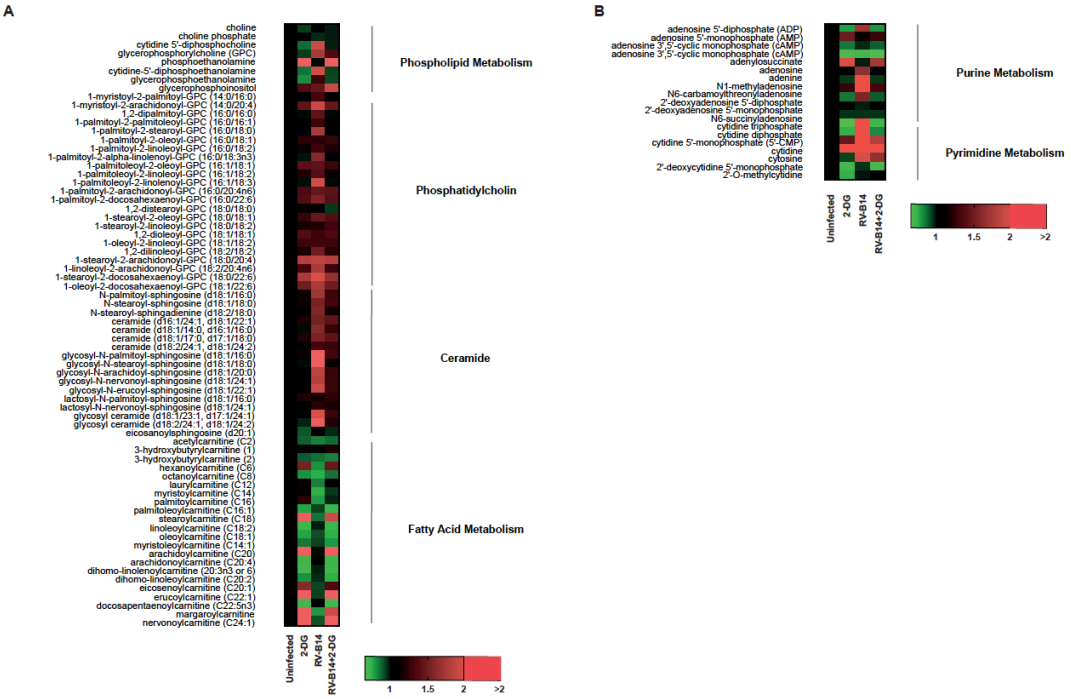

Fig. S6. Effect of 2-DG on RV-induced metabolic changes. Metabolomic analysis of HeLa cells infected with RV-B14 (MOI 3.5) and/or 2-DG at 7 h post infection. Panel A) shows the effect on lipid metabolism and Panel B) on nucleotide metabolism.

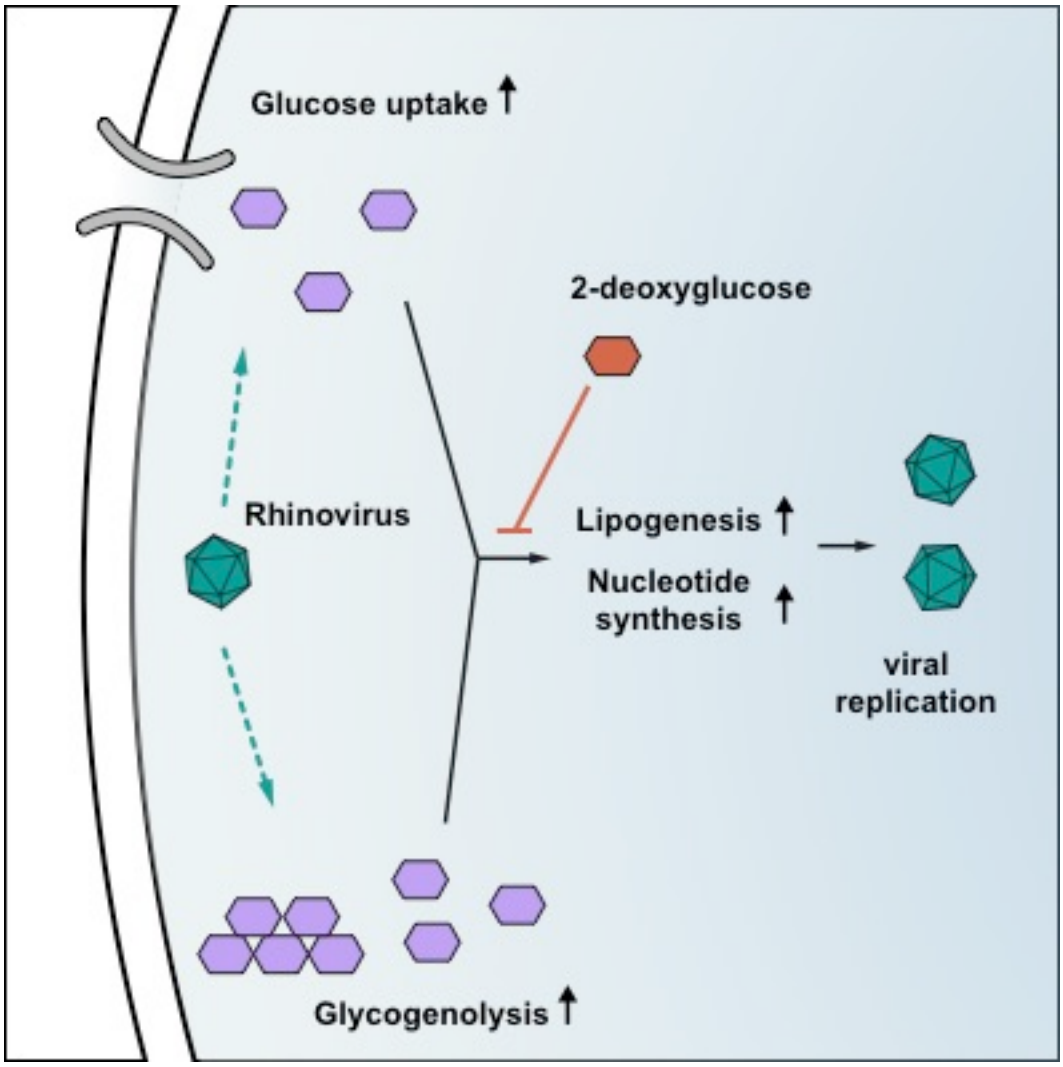

Fig. S7. Working model of RV-induced metabolic alterations and 2-DG's interruption

GLUT1 F	GATTGGCTCCTTCTCTGTGG
GLUT1 R	GTCAGGCCGCAGTACACAC
GLUT3 F	ATGGGGACACAGAAGGTCAC
GLUT3 R	CAGAGAGACGTGAGCAGCAC
HK1 F	GGACTGGACCGTCTGAATGT
HK1 R	ACAGTTCCTTCACCGTCTGG
HPRT F (human)	TCAGGCAGTATAATCCAAAGATG
HPRT R (human)	AGTCTGGCTTATATCCAACACTT
HRV 14 F	TCCACCTGATCGAAACGTCCA
HRV 14 R	GGCGCCATATCCAATGGTGT
HPRT F (mouse)	CGTCGTGATTAGCGATGATG
HPRT R (mouse)	ACAGAGGGCCACAATGTGAT
HRV 1B F	AATTGGCTGCAATGGTTCGC
HRV 1B R	CGCGGCATTACACATTTCAG

Table S1. Primer sequences

Dataset S1. Raw data of Metabolomics experiments