

Supplementary Material

Intramolecular interaction of NEP regulated by CRM1 ensures the unidirectional transport of M1 for the nuclear export of influenza viral ribonucleoprotein

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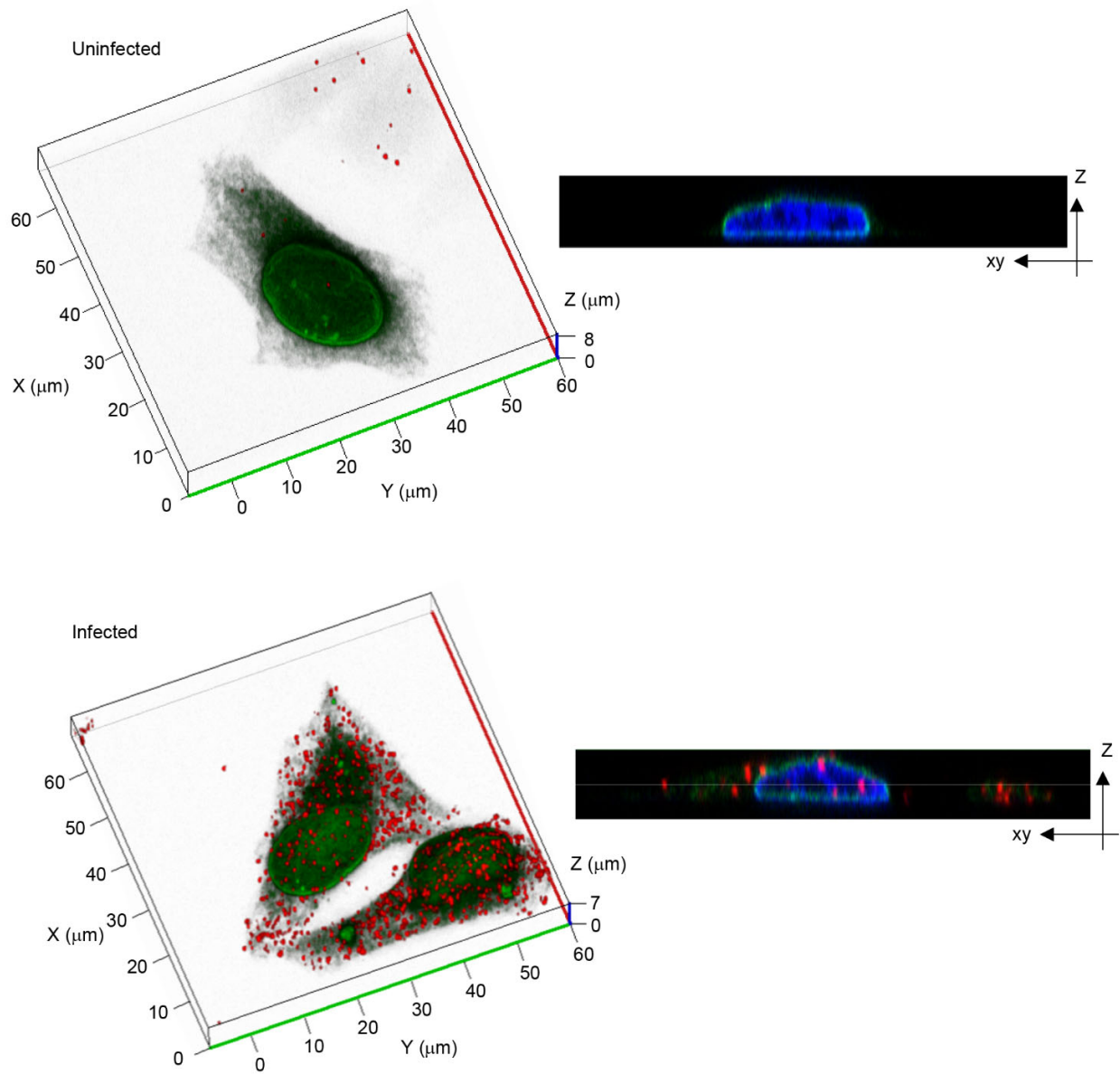
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Supplementary Figure 1

The 3D-reconstruction images of Figure 1B. Samples shown in Figure 1B (0 and 9 h post-infectionFr) were analyzed with ZEN software for 3D reconstruction. The infected HeLa cells expressing GFP-emerin (green) were subjected to *in situ* PLA with rat anti-NEP and rabbit anti-M1 antibodies (red).

	-53		-76			-106	-109	-113		-121
A/Puerto Rico/8/1934 (H1N1)	GDLHSLQNRNEKWREQLGQKFEE	IRWLI	EEVRHKLK	V-TENSF	-----	EQITFMQALHLL	LEVEQE	IRTF	SFQLI	
A/Beijing/262/1995 (H1N1)	GDLHSLQHRNGKWREQLGQKFEE	IRWLI	EEVRHKLK	T-TENSF	-----	EQITFMQALQL	LEVEQE	IRTF	SFQLI	
A/California/7/2009 (H1N1)	GDLHYLQSRNEKWREQLGQKFEE	IRWLI	EEVRHRLK	A-TENSF	-----	EQITFMQALQL	LEVEQE	IRAF	SFQLI	
A/Perth/16/2009 (H3N2)	GDLHLLQNRNGKWREQLGQKFEE	IRWLI	EEVRHRLK	T-TENSF	-----	EQITFMQALQL	LEVEQE	IRTF	SFQLI	
A/Hong Kong/156/1997 (H5N1)	GDLHSLQNRNGKWREQLSQKFEE	IRWLI	EEVRHRLR	I-TENSF	-----	EQITFMQALQL	LEVEQE	IRTF	SFQLI	
B/Brisbane/60/2008	TDY-----	HQKRET	IRLVTE	ELYLLSK	RIDDNILFHKT	VIANSSIIADMV	VSLSLLET	LYEMKD	VEVYSRQCL	

Supplementary Figure 2

The sequence alignment of NEP between H1N1, H3N2, H5N1 influenza A viruses and influenza B virus. Amino acid residues 53 to 121 of A/Puerto Rico/8/1934 (H1N1) NEP are aligned with that of A/Beijing/262/1995 (H1N1), A/California/7/2009 (H1N1), A/Perth/16/2009 (H3N2), A/Hong Kong/156/1997 (H5N1), and B/Brisbane/60/2008. Conserved residues are shown in yellow boxes. The amino acid positions 76, 106, 109, and 113 are shown in red.