SUPPLEMENTAL MATERIAL

Supplemental Video S1. Co-expression of NSvc2-N-YFP and the Golgi stack (Man49-mCherry) marker in *Nicotiana benthamiana* epidermal cells. The NSvc2-N-YFP and the Golgi bodies co-localize and move together along the ER track. The NSvc2-N-YFP signals fluoresce green; the Golgi bodies fluoresce red.

Supplemental Video S2. Co-expression of NSvc2-YFP and the Golgi stack (Man49-mCherry) marker in *Nicotiana benthamiana* epidermal cells. The NSvc2-C-YFP (processed from the glycoprotein precursor NSvc2-YFP) and the Golgi bodies co-localize and move together along the ER track. The NSvc2-YFP signals fluoresce green; the Golgi bodies fluoresce red.

Supplemental Video S3. The effects of LatB treatment on the movement of bodies labeled by NSvc2-N-YFP and Golgi bodies labeled by Man49-mCherry. The NSvc2-N-YFP signals fluoresce green; the Golgi bodies fluoresce red.

Supplemental Video S4. The effects of LatB treatment on the movement of bodies labeled by NSvc2-N/NSvc2-C-YFP and Golgi bodies labeled by Man49-mCherry. The NSvc2-YFP signals fluoresce green; the Golgi bodies fluoresce red.

Supplemental Table S1. List of primers used for making RSV NSvc2 constructs in this study.

Clone Name		Primer Name	Primer Sequence	Purpose
p1300S-NSvc2-N-YFP	F	XT746	CGAGATCT**GGTACC**ATGCATTTTAAATCATATTTC	To amplify RSV NSvc2-N and clone into p1300S-YFP.
	R	XT747	ACGGATCCGGCGCGCCCATTCTCTACTTTTCTACCC	
p1300S-NSvc2-C-YFP	F	XT800	CG**GGTACC**ATGAGGAAGGGTAGAAAAGTAG	To amplify RSV NSvc2-C and clone into p1300S-YFP.
	R	XT388	GGGGATCCATCAACCTGTCTGATGTCA	
p1300S-NSvc2-Intron-YFP	F	XT746	CGAGATCT**GGTACC**ATGCATTTTAAATCATATTTC	To amplify the ST-LS1 intron, N-terminal fragment and C-terminal fragment of NSvc2, respectively, then mix the three fragments and do overlap PCR to obtain NSvc2-Intron and clone into p1300S-YFP.
	R	XT959	GGTAGAAGCAGAAACTTACCTCTCTATATTAGAAATGC	
	F	XT957	GTAAGTTTCTGCTTCTACC	
	R	XT958	CTGCACATCAACAAATTTTG	
	F	XT960	CAAAATTTGTTGATGTGCAGGTGCACAAATAATAGTTGTG	
	R	XT388	GGGGATCCATCAACCTGTCTGATGTCA	
p1300S-NSvc2-N-46del-YFP	F	XT746	CGAGATCT**GGTACC**ATGCATTTTAAATCATATTTC	To amplify RSV NSvc2-N containing a 46 amino acid deletion at the C-terminus and clone into p1300S-YFP.
	R	XT807	GCGGATCCATCTACAACAGGTCTCCTA	
p1300S-NSvc2-N-63del-YFP	F	XT746	CGAGATCT**GGTACC**ATGCATTTTAAATCATATTTC	To amplify RSV NSvc2-N containing a 63 amino acid deletion at the C-terminus and clone into p1300S-YFP.
	R	XT835	GCGGATCCTAGAAGCCAAAATGCAGGTT	
p1300S-SS_N-$TMD_N$$CT_N$-YFP	F	XT746	CGAGATCT**GGTACC**ATGCATTTTAAATCATATTTC	To amplify RSV NSvc2-N containing signal peptide (SS_N) and transmembrane domain (TMD_N) containing the full- length cytoplasmic domain (CT_N) and clone into p1300S-YFP.
	R	XT837	GAATATCTATAGATGTGGGAGAAAGGGATTGGTGCACC	
	F	XT836	GGTGCACCAATCCCTTTCTCCCACATCTATAGATATTC	
	R	XT747	ACGGATCCGGCGCGCCCATTCTCTACTTTTCTACCC	
p1300S-SS_N-TMD_N-CTndel46-YFP	F	XT746	CGAGATCT**GGTACC**ATGCATTTTAAATCATATTTC	To amplify RSV NSvc2-N containing signal sequence (SS_N), TMD_N and the CT_N with a 46 amino acid deletion
	R	XT837	GAATATCTATAGATGTGGGAGAAAGGGATTGGTGCACC	
	F	XT836	GGTGCACCAATCCCTTTCTCCCACATCTATAGAT	

			ATTC	and clone into p1300S-YFP.
	R	XT807	GCGGATCCTACAACAGGTCTCCTATGAC	
p1300S-$SS_N$$TMD_N$$CT_N$del63-YFP	F	XT746	CGAGATCT**GGTACC**ATGCATTTTAAATCATATTTC	To amplify RSV NSvc2-N containing signal sequence (SS_N), TMD_N and the CT_N with a 63 amino acid deletion and clone into p1300S –YFP.
	R	XT837	GAATATCTATAGATGTGGGAGAAAGGGATTGGTGCACC	
	F	XT836	GGTGCACCAATCCCTTTCTCCCACATCTATAGATATTC	
	R	XT835	GCGGATCCTAGAAGCCAAAATGCAGGTT	
p1300S-NSvc-C(TMD_N CT_N)-YFP	F	XT800	CG**GGTACC**ATGAGGAAGGGTAGAAAAGTAG	To amplify a fragment of NSvc2-C($TMD_N$$CT_N$) which swapping the TMD_C and the CT_C with the TMD_N and CT_N fragment and clone into p1300S-YFP.
	R	XT869	GAATATCTATAGATGTGGGACATCCAATTGGTGGTGCTG	
	F	XT868	CAGCACCACCAATTGGATGTCCCACATCTATAGATATTC	
	R	XT747	ACGGATCCGGCGCGCCCATTCTCTACTTTTCTACCC	
p1300S-NSvc-C ($TMD_N$$CT_N$del46)-YFP	F	XT800	CG**GGTACC**ATGAGGAAGGGTAGAAAAGTAG	To amplify a fragment of NSvc2-C($TMD_N$$CT_N$del46) which swapping the TMD_C and the CT_C with the TMD_N and CT_N del46 and clone into p1300S-YFP.
	R	XT869	GAATATCTATAGATGTGGGACATCCAATTGGTGGTGCTG	
	F	XT868	CAGCACCACCAATTGGATGTCCCACATCTATAGATATTC	
	R	XT807	GCGGATCCTACAACAGGTCTCCTATGAC	
p1300S-CFP-Sec24	F	XT743	CGGGATCCATGGGTACGGAGAATCAGGG	To amplify the full-length Sec24 gene and clone into p1300S-CFP.
	R	XT754	CGGGATCCTTAGTTTTGTTGAACTTGGCG	
p1300S-Arf1-CFP	F	XT784	CGGGATCCATGGGGTTGTCATTCGGAAA	To amplify the Arf1 gene and clone into p1300S-CFP.
	R	XT785	CGGGATCCTGCCTTGCTTGCGATGTTG	
p1300S-Arf1 (T31N)	R	XT795	CTTGTAGAGGATAGTGTTCTTACCAGCAGCAT	To site-directed mutagenesis of Arf1 (T31N) and clone into p1300S.
	F	XT794	ATGCTGCTGGTAAGAACACTATCCTCTACAAG	

Kpn I site is in bold; *Bam*H I site is underlined.