

1 Supplemental table S1. Bacterial strains and plasmids used in this study.

	Description	Antibiotics*	Reference
GAS strains			
JRS4	M6 strain.	Sm	26
JRS4 Δ slo	SLO-defective mutant of JRS4.	Sm, Km	This study
JRS4 Δ slo-comp	JRS4 Δ slo with an IPTG-inducible SLO-expressing-plasmid.	Sm, Km, Tet	This study
E. coli			
DH10B	Plasmid construction and propagation.	-	Invitrogen
Plasmids			
pSF151	Shuttle vector for the construction of GAS mutant strains.	Km	27
pSF151-fSLO	pSF151 harboring an internal fragment of slo gene.	Km	This study
pENTR-SD-TOPO	Cloning vector adapted for Gateway system.	Km	Invitrogen
pOGW	IPTG inducible vector for protein expression.	Tet	29
pOGW-SLO	pOGW harboring intact slo gene.	Tet	This study
pEGFP-LC3	Expression plasmid for EGFP-fused LC3.	Km	30
pmCherry-1	Vector for the expression of mCherry-fused protein.	Km	Clontech
pmCherry-LC3	Expression plasmid for mCherry-fused LC3.	Km	This study
pENTR11	Cloning vector adapted for Gateway system.	Km	Invitrogen
pENTR-EGFP-LC3	pENTR11 harboring EGFP-fused LC3 expressing gene.	Km	This study
pKF19K	Vector used for the induction of mutation.	Km	Takara
pcDNA3.1 Zeo(+)	Vector for protein expression.	Amp	Invitrogen
pcDNA3.1 Zeo(+)-	Expression plasmids for EGFP-fused Rab5.	Amp	This study
EGFP-Rab5			
pcDNA3.1 Zeo(+)-	Expression plasmids for EGFP-fused mutant Rab5.	Amp	This study
EGFP-Rab5Q79H, Rab5S34N			
pcDNA3.1 Zeo(+)-	Expression plasmids for EGFP-fused Rab7.	Amp	This study
EGFP-Rab7			
pcDNA3.1 Zeo(+)-	Expression plasmids for EGFP-fused mutant Rab7.	Amp	This study
EGFP-Rab7Q67L, Rab7T22N			
pAd/CMV/V5-DEST	Plasmid for protein-expressing adenovirus.	Amp	Invitrogen

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1 Supplemental table S1, continued.

	Description	Antibiotics*	Reference	
3	pAd-EGFP- Rab5	Plasmid for the production of Rab5 protein-expressing-adenovirus.	Amp	This study
5	pAd-EGFP- Rab5Q79H, Rab5S34N	Plasmids for the production of mutant Rab5 protein-expressing-adenovirus.	Amp	This study
7	pAd-EGFP- Rab7	Plasmid for the production of Rab7 protein-expressing-adenovirus.	Amp	This study
9	pAd-EGFP- Rab7Q67L, Rab7T22N	Plasmids for the production of mutant Rab7 protein-expressing-adenovirus.	Amp	This study

11 *Antibiotics; Resistance to antibiotics.

12 Abbreviations: Sm, Streptomycin; Amp, ampicillin; Km, Kanamycin; Tet, Tetracycline.

1 Supplemental table S2. Sequences of synthetic oligonucleotides used for PCR and mutagenesis.

2 Target gene or purpose	3 Primer sequence
3 <i>slo</i> , internal fragment	5'- <u>GAGAATT</u> CGAGCGAAGAAGATCACACTGAAGA
4	5'- <u>GAGGATCC</u> GCTTGTATGCTGCAATCATCACCT
5 Rab5	5'-CACCATGGCTAGTCGAGGCAGCAACAAGA
6	5'-TTAGTTACTACAAACACTGATTCCCTGGTT
7 Rab7	5'-CACCATGACCTCTAGGAAGAAAGTGTG
8	5'-TCAGCAACTGCAGCTTCTGCCGAGGCC
9 Intact <i>slo</i>	5'-CACCCACCATGAAGGACATGTCTAATAAAAAAACATT
10	5'-CTACTTATAAGTAATCGAACCATATGGGCT
11 Rab5Q67L	5'- GCTGGT <u>CTAG</u> AACGATA <u>CC</u> ATAGCCTA
12	5'- TCGTT <u>CTAG</u> ACCAGCTGTATCCCATAT '
13 Rab5S34N	5'- GGCAAA <u>AA</u> ATAGCCTAGTGCTTCGTTT
14	5'- TAGG <u>CTATT</u> TTGCCAACAGCGGACTC
15 Rab7Q67L	5'- GCAGG <u>ACTCG</u> AACGGTCCAGTCTCTC
16	5'- CCGTT <u>CGAG</u> TCCGCTGTGTCCCATAT
17 Rab7T22N	5'- GGG <u>AAGAATT</u> CACTCATGAACCAGTAT
19	5'- AGT <u>GAATT</u> CTCCCCGACTCCAGAAC

20 Underlines show restriction enzyme sites or mutagenesis sites.