

**Table S5.** List of plasmids constructed and used in this study

plasmid	backbone	description	source
<b>recombinant vector construction</b>			
pUCATPH	-	<i>hph</i>	[85]
pMaM330	pFA6a	<i>mCherry-myeGFP-kanMX6</i>	[86]
pSD1	pBluescript II	$P_{gpdA}$ , $P_{trpC}$ , <i>neo</i> <sup>R</sup>	[87]
pBS-genR	pBluescript II	<i>neo</i> <sup>R</sup>	[68]
pFC332	-	<i>AMA1</i> , <i>hph</i> , $P_{tef1}$ - <i>SpCas9-Tef1</i>	[43]
pFC334	-	<i>AMA1</i> , <i>argB</i> , $P_{gpdA}$ -HH-sgRNA backbone-HDV - $T_{trpC}$	[43]
pOSCAR	pZP-RCS2	<i>A. tumafaciens</i> binary vector	[88]
<b>fluorescent labeling</b>			
pMF357	-	$P_{ccg1}$ - <i>Nch1-sgfp</i> , <i>hph</i>	[59]
pVV19	pOSCAR	$P_{VdH1}$ - <i>VdH1-mCherryFP-T<sub>tef1</sub></i> , <i>neo</i> <sup>R</sup>	This study
pIGPAPA	-	$P_{ICL}$ - <i>sgfp-T<sub>nosh</sub></i> , <i>hph</i>	[89]
<b>CRISPR/Cas9 mediated <i>atg8</i>-targeting</b>			
pVV25	pOSCAR	5' $H_{Vdatg8}$ - <i>sgfp</i> -3' $H_{Vdatg8}$ (H: 1.0 kb-long homology arms)	This study
pVV26	pOSCAR	5' $H_{Vdatg8}$ - <i>mCherryFP</i> -3' $H_{Vdatg8}$ (H: 1.0 kb-long homology arms)	This study
pVV27	pFC332	$P_{gpdA}$ -HH-crRNA for <i>Vdatg8</i> -HDV- $T_{trpC}$	This study
<b><i>atg1</i> deletion</b>			
pOSCAR- <i>atg1</i>	pOSCAR	5' $H_{Vdatg1}$ - <i>hph</i> -3' $H_{Vdatg1}$ (H: 2.0 kb-long homology arms)	This study