

Table S1. Plasmids used in this study.

Plasmid	Description	Used for
pSAG1::CAS9-U6::sgUPRT	CAS9 expressed from the <i>SAG1</i> promoter and CRISPR gRNA targeting <i>UPRT</i> produced from the <i>U6</i> promoter	CRISPR plasmid targeting <i>UPRT</i>
pSAG1::CAS9-U6::sgUPRT-OT1	A derivative of pSAG1::CAS9-U6::sgUPRT, containing two mutations in the <i>UPRT</i> targeting gRNA	Specificity control for pSAG1::CAS9-U6::sgUPRT
pSAG1::CAS9-U6::sgUPRT-OT2	A derivative of pSAG1::CAS9-U6::sgUPRT, containing two mutations in the <i>UPRT</i> targeting gRNA	Specificity control for pSAG1::CAS9-U6::sgUPRT
pSAG1::CAS9-U6::sgROP18	CAS9 expressed from the <i>SAG1</i> promoter and CRISPR gRNA targeting <i>ROP18</i> produced from the <i>U6</i> promoter	CRISPR plasmid targeting <i>ROP18</i>
pUPRT::DHFR-I	DHFR* cassette flanked by two homology arms from <i>UPRT</i> close to the gRNA(<i>UPRT</i>) targeting region	Inserting <i>DHFR*</i> into <i>UPRT</i>
pUPRT::DHFR-D	DHFR* cassette flanked by two homology arms from the 5'- and 3'-UTR of <i>UPRT</i> gene respectively	Replacing the <i>UPRT</i> gene by <i>DHFR*</i>
pROP18::DHFR	DHFR* cassette flanked by two homology arms from <i>ROP18</i> close to the gRNA(<i>ROP18</i>) targeting region	Inserting <i>DHFR*</i> into <i>ROP18</i>
pUPRT::IMC1-ROP18	A cassette expressing <i>ROP18</i> from the <i>IMC1</i> promoter flanked by two homology arms from the 5'- and 3'-UTR of <i>UPRT</i> gene respectively	To complement a <i>rop18</i> mutant at the <i>UPRT</i> locus
pDONR-P4P1r-UpgRNA	A 750 bp fragment upstream the gRNA target in <i>UPRT</i> gene cloned into the donor vector pDONR-P4P1r	LR ligation making pUPRT::DHFR-I
pDONR-P2rP3-DngRNA	A 900 bp fragment downstream the gRNA target in <i>UPRT</i> gene cloned into the donor vector pDONR-P2rP3	
pDONR-P1P2-DHFR*	DHFR* cassette cloned into the donor vector pDONR-P1P2	LR ligation making pUPRT::DHFR-I, pUPRT::DHFR-D and pROP18::DHFR

pDONR-P4P1r-U5UPRT	The 5'-UTR region (1Kb) of the <i>UPRT</i> gene cloned into the donor vector pDONR-P4P1r	LR ligation making pUPRT::DHFR-D
pDONR-P2rP3-U3UPRT	The 3'-UTR region (1Kb) of the <i>UPRT</i> gene cloned into the donor vector pDONR-P2rP3	
pDONR-P4P1r-UpROP18	A 820 bp fragment upstream the gRNA target in <i>UPRT</i> gene cloned into the donor vector pDONR-P4P1r	LR ligation making pROP18::DHFR
pDONR-P2rP3-DnROP18	A 850 bp fragment downstream the gRNA target in <i>UPRT</i> gene cloned into the donor vector pDONR-P2rP3	