

Table S3: Oligonucleotides used in this study.

Purpose	Name	Description	Sequence 5'-3'
IMC29 (TGGT1_243200) tagging	P1	IMC29 gRNA-tagging sense	AAGTTGCTCCGTTTCTGGTGTGTCTG
	P2	IMC29 gRNA-tagging antisense	AAAACAGACACACCAGAAACGGAGCA
	P3	IMC29 HDR tagging template fwd	CTCACGCTCAGGCAGCAGTAGACCCCGGACACGGCCTCAATGGAAGTGGAGGACGGGAATTC
	P4	IMC29 HDR tagging template rev	GTCACATCCGTATACACGGTTCTATGAGCAGATTCCGTCGACGGCCAGTGAATTGTAATA
IMC29 (TGGT1_243200) knockout	P5	IMC29 gRNA-KO sense	AAGTTgTAAGGGTGCAAGAGTTGATGG
	P6	IMC29 gRNA-KO antisense	AAAACCATCAACTCTTGCACCCTTAcA
	P7	IMC29 HDR KO template fwd	GCTGAAGACTCCGCTGATCAAGCTCACGAAGGCAAAACACGGGAAGTGGAGGACGGGAATT
	P8	IMC29 HDR KO template rev	AGTCCACTGCTGCTCCTCGAGCAGTCTGGGAGATTTGGCGACGGCCAGTGAATTGTAATA
IMC29 (TGGT1_243200) knockout regenerated	P9	IMC29 gRNA-KO sense new	AAGTTGAACGATGAGCCGAGCAAGGG
	P10	IMC29 gRNA-KO antisense new	AAAACCTTGTCTCGGCTCATCGTTCA
	P11	IMC29 HDR KO template fwd new	GCCCAAGCAGAGCTGCTGCCGTTTGGTGGTCCAGGAATCCCACTCCATGGAACCTGACTG
	P12	IMC29 HDR KO template rev new	GATTCTGACCCACCAACGGCAGCAGCTCTGCTTGGGCCCTGCAAGTGCATAGAAGGAA
AC9 (TGGT1_246950) tagging	P13	AC9 gRNA-tagging sense	AAGTTATGTGTTCTCAATGTCCAGG
	P14	AC9 gRNA-tagging antisense	AAAACCTGACATTTGAGGAACACATA
	P15	AC9 HDR template fwd	GCTGGAAGACTCCGCTGATCAAGCTAACGAAATATCCGAGGGAATGGGAAGTGGAGGACGGGAATTC
	P16	AC9 HDR template rev	CTCGCAGCGTGTGCGACTGAACTCTTGTGCGGAGAGAGCGACGGCCAGTGAATTGTAATA
FBXO1 (TGGT1_310930) tagging	P17	FBXO1 gRNA-tagging sense	AAGTTAGCCTTCTGGAGCACGGCAGG
	P18	FBXO1 gRNA-tagging antisense	AAAACCTGCCGTGCTCCAGAAGGCTA
	P19	FBXO1 HDR template fwd	CATAATCGATTACTACATGAGTCAGGGCGGAGCCAAATGCGGGAAGTGGAGGACGGGAATT
	P20	FBXO1 HDR template rev	GGTATCAGATCATCGAGAACAACGTTCCGATGCTGCTCCCGACGGCCAGTGAATTGTAATA
IMC32 (TGGT1_232150) tagging	P21	IMC32 gRNA-tagging sense	AAGTTATGCTGTGGCGGGAAGTTG
	P22	IMC32 gRNA-tagging antisense	AAAACAACCTTCTCCGCCACAGCATA
	P23	IMC32 HDR template fwd	GCTGAAGACTCCGCTGATCAAGCTCACGAAGGCAAAACACGGGAAGTGGAGGACGGGAATT
	P24	IMC32 HDR template rev	AGTCCACTGCTGCTCCTCGAGCAGTCTGGGAGATTTGGCGACGGCCAGTGAATTGTAATA
IMC29 full length cDNA	P25	IMC29 full length fwd (BgIII)	AGATCTATGGAAGCGTTGCCGTGCAAC
	P26	IMC29 full length rev (NotI)	gcgggcgcATTGAGGCCGTGTCGGG
IMC29 endogenous promoter	P27	IMC29 promoter fwd (NsiI)	ATGCATCAC TACCACACCGTTTTATCAACT
	P28	IMC29 promoter rev (BgIII)	AGATCTTTTCGACAGGTCTTTCTGTTTAAAGT
IMC29 deletion construct (Δ 2-100)	P29	IMC29 2-100 fwd (BgIII)	AGATCTATGGGCGAGCGGGGAAGGCTTTTC
IMC29 deletion construct (Δ 2-137)	P30	IMC29 2-137 fwd (BgIII)	AGATCTATGGCTCTGGCCAAAGCGGCAG
IMC29 deletion construct (Δ 2-199)	P31	IMC29 2-199 fwd (BgIII)	AGATCTatgGCCCCAAGCAAGCAGAGCTC
IMC29 deletion construct (Δ 2-389)	P32	IMC29 2-389 fwd (BgIII)	AGATCTATGCTCCTCACGCTTGGCAAGAAAGC
IMC29 deletion construct (Δ 2-500)	P33	IMC29 2-500 fwd (BgIII)	AGATCTATGGGTATTCCTATTCCACCGTTCT
IMC29 deletion construct (Δ 1111-1258)	P34	IMC29 1111-1258 rev (NotI)	gcgggcgcGACATCCTGGAAGGACGACA
IMC29 deletion construct (Δ 1218-1258)	P35	IMC29 1218-1258 rev (NotI)	gcgggcgcGCTCCGTACAGCCGCTTGA
IMC29 deletion construct (Δ 1111-1218)	P36	IMC29 1111-1218 fwd (Q5)	GAAACGCCAGGAAGAGCA
	P37	IMC29 1111-1218 rev (Q5)	GACATCCTGGAAGGACGAC
	P38	294610 gRNA-tagging sense	AAGTTGGAGAGTTTTCGACAGTGTCTG
TgGT1_294610 epitope tagging	P39	294610 gRNA-tagging antisense	AAAACAAGCACTGTCCGAACTCTCCA
	P40	294610 HDR template fwd	GCACTCTCAATACAAGATGGTCTTCCGACAGGGTCTCCAGGAAGTGGAGGACGGGAATT
	P41	294610 HDR template rev	TACCTGTTGAGAATCCCTTCATCATAGGAAGATAGTGGCAGCGCCAGTGAATTGTAATA
TgGT1_255450 epitope tagging	P42	255450 gRNA-tagging sense	AAGTTgCTTGTCCACCTCTCAAACCTCG
	P43	255450 gRNA-tagging antisense	AAAACGAGTTTGGAGGTTGGACAAGcA
	P44	255450 HDR template fwd	CTTCTGGACGCAAAATGTGCAAGCACCTAGAGACTGCTCAGGGAAGTGGAGGACGGGAATT
TgGT1_240630 epitope tagging	P45	255450 HDR template rev	GGTTTAAACGAATGTGAGTTTCAGATGACTCGCAGAAGTGCAGCGCCAGTGAATTGTAATA
	P46	240630 gRNA-tagging sense	AAGTTATGGCGTGGCAGGATAGCCGG
	P47	240630 gRNA-tagging antisense	AAAACCGCTATCCTGCCACGCCATA
TgGT1_294860 epitope tagging	P48	240630 HDR template fwd	TGCACCGCCGAAGCCAAAGAGTTACCAGTATTAAGATGTGGAAGTGGAGGACGGGAATTC
	P49	240630 HDR template rev	AATGTCTTGTCTGCCGACCGCAAACGACGCATCAGACCGACGGCCAGTGAATTGTAATA
	P50	294860 gRNA-tagging sense	AAGTTGAGTGTGACGGGAGACGG
TgGT1_311770 epitope tagging	P51	294860 gRNA-tagging antisense	AAAACCGTCTCCCGCTAGCAGCTGCA
	P52	294860 HDR template fwd	GGGGGGCGCAGGGAAGCTGGGGAGACAAGTACGCTTTTACGGAAGTGGAGGACGGGAATT
	P53	294860 HDR template rev	CGCCGATACAATGACGGGACCCGAGACAGACGCGAGAACGACGGCCAGTGAATTGTAATA
TgGT1_297870 epitope tagging	P54	311770 gRNA-tagging sense	AAGTTGTTGTCTCAGTCCACTTTGG
	P55	311770 gRNA-tagging antisense	AAAACCAAGAGTGGACTGAGACAACA
	P56	311770 HDR template fwd	GGCAGATGGAAGACAGGTATAAATCCGCAAGAGGCCTCGGAAGTGGAGGACGGGAATT
TgGT1_249440 epitope tagging	P57	311770 HDR template rev	CTCCCCAGAGAAATTTCTACATACTCCTGTACAGACCCGACGGCCAGTGAATTGTAATA
	P58	297870 gRNA-tagging sense	TTCCGTGGCGACGACACAAGAGAGCTTACTCCGTCAACGGAAGTGGAGGACGGGAATT
	P59	297870 gRNA-tagging antisense	TACAAAGAAAATCACAATTCGACTGACTCAGCTTCCGTCGACGGCCAGTGAATTGTAATA
TgGT1_220900 epitope tagging	P60	297870 HDR template fwd	AAGTTgCAACAAGAGCCACTGCACGGG
	P61	297870 HDR template rev	AAAACCGTGCAGTGGCTCTTGTGcA
	P62	249440 gRNA-tagging sense	AAGTTGCAAGTGGAAACATGAGTCGCAG
TgGT1_310450 epitope tagging	P63	249440 gRNA-tagging antisense	AAAACGCGACTCATGTTCCACTGCA
	P64	249440 HDR template fwd	TGGTGGAGGAATTTCCGCGCTGAACCTCAATTTTACTCGGAAGTGGAGGACGGGAATT
	P65	249440 HDR template rev	CAGACGGACTTGGTAAAGCAACCATCACAACTGCTCCGACGGCCAGTGAATTGTAATA
TgGT1_220900 epitope tagging	P66	220900 gRNA-tagging sense	AAGTTGGGTAGACTGATGCTTCCAG
	P67	220900 gRNA-tagging antisense	AAAACGGAAGCATCAGATCTACCCA
	P68	220900 HDR template fwd	TGCGCCACAGAGTACTCCCTTGAATTTGAAAGCATTCCGGAAGTGGAGGACGGGAATT
TgGT1_310450 epitope tagging	P69	220900 HDR template rev	CCTGAGGTGTACAGCACAGGGCCACTGCTCAGACACCGACGGCCAGTGAATTGTAATA
	P70	310450 gRNA-tagging sense	AAGTTgTCTGTGAACATGCTAGTTCGG
	P71	310450 gRNA-tagging antisense	AAAACCGAAGTGCATGTTCCACAGAcA
TgGT1_310450 epitope tagging	P72	310450 HDR template fwd	GCGCTCGGAGTTTCACTGTCACACCAAGGTGTTCCGTTGGGGAAGTGGAGGACGGGAATT
	P73	310450 HDR template rev	GAAGATTGTGCATTTCCATATCTCCAGCAAAGACTCTGCGACGGCCAGTGAATTGTAATA
	P74	238170 gRNA-tagging sense	AAGTTATATGATGACGAAGGGATGTG

TgGT1_238170 epitope tagging	P75	238170 gRNA-tagging antisense	AAAACACATCCCTTCGTCATCATATA
	P76	238170 HDR template fwd	CACGAAATCGCGTCTCTTCTCGCTTTACACGACCTTCTTGGAAAGTGGAGGACGGGAATT
	P77	238170 HDR template rev	ATACAAATCGACAAGAAATCACAAATCGAGACAGATCCCGACGGCCAGTGAATTGTAATA
TgGT1_221630 epitope tagging	P78	221630 gRNA-tagging sense	AAGTTACAACGTTTCTCACTTCGTTCCG
	P79	221630 gRNA-tagging antisense	AAAACGAACGAAGTGAAGCGTTGTA
	P80	221630 HDR template fwd	TGGACCCAGCAATCGTGCTGTGACAGTGACGGATCTTCTGGAAGTGGAGGACGGGAATT
TgGT1_224000 epitope tagging	P81	221630 HDR template rev	CCGTACGAGACAACACCACAACGACCCTCGAAGCAGTCCGACGGCCAGTGAATTGTAATA
	P82	224000 gRNA-tagging sense	AAGTTGAGCAACAAGATGCGCAAACG
	P83	224000 gRNA-tagging antisense	AAAACGTTTGCGCATCTTGTGCTCA
TgGT1_235690 epitope tagging	P84	224000 HDR template fwd	AACTGGCGGCGAGGGGCTGACATAAAAGGACTCGTCTTGGAAAGTGGAGGACGGGAATT
	P85	224000 HDR template rev	TACTCCTGAGTGAATCAAGAAAACCTTTCACCTTCTGCCGACGGCCAGTGAATTGTAATA
	P86	235690 gRNA-tagging sense	AAGTTGTAAGACTACCCTTGCCTGAG
TgGT1_235690 epitope tagging	P87	235690 gRNA-tagging antisense	AAAACGTTTGCGCATCTTGTGCTCA
	P88	235690 HDR template fwd	ACACAAGGCTCGCTCTCATAAGAGGAAATTGATTTGTTGCGGAAGTGGAGGACGGGAATT
	P89	235690 HDR template rev	ACTCTAGAGCGTGGCAGAAATGTGCTCTTCTGGACCGACGGCCAGTGAATTGTAATA
TgGT1_293360 epitope tagging	P90	293360 gRNA-tagging sense	AAGTTGGACTTCTAGGGATTGTTGGG
	P91	293360 gRNA-tagging antisense	AAAACGTTTGCGCATCTTGTGCTCA
	P92	293360 HDR template fwd	GTTTCGCAGCATGCTCCGGCCGTACAGATCGATCTATTCCGGAAGTGGAGGACGGGAATT
TgGT1_255420 epitope tagging	P93	293360 HDR template rev	TGACATGGACAAAACGCTGACATTCCGTGAGGCAATCCGACGGCCAGTGAATTGTAATA
	P94	255420 gRNA-tagging sense	AAGTTGGTTCTCTATCCAGTGACGG
	P95	255420 gRNA-tagging antisense	AAAACGTTTGCGCATCTTGTGCTCA
TgGT1_255420 epitope tagging	P96	255420 HDR template fwd	AGGAGAAGGGGCTGCGGAATTGCTGGAGTCTCTTAATGCAGGAAGTGGAGGACGGGAATT
	P97	255420 HDR template rev	AAGAAGATTCTGCTGCGAACGTGTGCGGTCGATCTTCCCGACGGCCAGTGAATTGTAATA
	P98	269960 gRNA-tagging sense	AAGTTgATCCCCGTTTCTGCGCTTCGG
TgGT1_269960 epitope tagging	P99	269960 gRNA-tagging antisense	AAAACGTTTGCGCATCTTGTGCTCA
	P100	269960 HDR template fwd	TGGACAATCTCTCGACGCAGGGAGCACCGCTTCTTTCGCCGGAAGTGGAGGACGGGAATT
	P101	269960 HDR template rev	TCCGCTCTCTGCTCTTTGCCCGGTGGCGGTTCTTTCGACGGCCAGTGAATTGTAATA
TgGT1_225560 epitope tagging	P102	225560 gRNA-tagging sense	AAGTTGAAGTGTCTTTCGACGAATAG
	P103	225560 gRNA-tagging antisense	AAAACGTTTGCGCATCTTGTGCTCA
	P104	225560 HDR template fwd	GTCCACTCGTGAGGAGAACAATAAACGACTTTTTTACGATGGAAGTGGAGGACGGGAATT
TgGT1_312100 epitope tagging	P105	225560 HDR template rev	GACACCACATTTCAAAAGTGGCATCGAATGATCAGGGCGACGGCCAGTGAATTGTAATA
	P106	312100 gRNA-tagging sense	AAGTTGCACACGAAAGAAACGCTG
	P107	312100 gRNA-tagging antisense	AAAACGTTTGCGCATCTTGTGCTCA
TgGT1_312100 epitope tagging	P108	312100 HDR template fwd	ACTCAGTGACGCCAGGGAGGAGGCATGCATAGAAATGCAAGGAAGTGGAGGACGGGAATT
	P109	312100 HDR template rev	GCGCCCTGTTCTCAAAACTTCTCCGTTCCCTTGTGCGCAGGGCCAGTGAATTGTAATA
	P110	311230 gRNA-tagging sense	AAGTTgTTTGTAGTGGCGGCAACATG
TgGT1_311230 epitope tagging	P111	311230 gRNA-tagging antisense	AAAACATGTTCCGCCACTACAAAcA
	P112	311230 HDR template fwd	GCAGCCTCGTGTTCGCCCGGAAGAAGAGGGCTGCGAGGGAAGTGGAGGACGGGAATT
	P113	311230 HDR template rev	CACGGTTTATCTCGAAGTTGACGATGGGGCAGAACCACCGACGGCCAGTGAATTGTAATA
TgGT1_202550 epitope tagging	P114	202550 gRNA-tagging sense	AAGTTgAAAGTCGCTCGCGACCCATGG
	P115	202550 gRNA-tagging antisense	AAAACCATGGGTCGCGAGCGACTTcA
	P116	202550 HDR template fwd	GCGGTGGGAGGAAGTAAAGGCAAGGACGCACAAAGGCGCGGAAGTGGAGGACGGGAATT
TgGT1_229260 epitope tagging	P117	202550 HDR template rev	TCCGAGACATGGGACTCATCGTCTCCAAAACAAACGCGCAGGGCCAGTGAATTGTAATA
	P118	229260 gRNA-tagging sense	AAGTTGCGCGGCAACGACGCTGTG
	P119	229260 gRNA-tagging antisense	AAAACACAGCGTCCGTTGGCCGCGCA
TgGT1_229260 epitope tagging	P120	229260 HDR template fwd	CTACAGAAACGGCGTTCTGCTCTCTTGCAAATGAAATCGGAAGTGGAGGACGGGAATT
	P121	229260 HDR template rev	TCTACAGAAGAGAGACCCTTGGTCTGTCTATACACCAGCGACGGCCAGTGAATTGTAATA