

**S1 Table. Primers used in this study (qRT-PCR, cloning and genotyping).**

**Oligos for cloning guide RNAs**

P1 SAA gRNA ex2a F TAGGAAGCGATACCACTGCGCC  
P2 SAA gRNA ex2a R AAACGGCGCAGTGGTATCGCTT

**Primers for Saa mutation screening and genotyping**

P3 crisprSAA F1 CATGAAGCTTCTTCTTGCTGTGCTGG  
P4 crisprSAA R1 GGAATAACAACACTGACCTCCAGCGGCTTCTCC  
P9 saa genotyping R2 intron CATAAACACTATCAAGTTGCCCAAATTGTG

**Primers for cloning danio rerio cldn15la promoter**

P5 dr cldn15laF AAGGCCGGCCGCTGTTACAGTGATTCCCTCACTAATGG  
P6 dr cldn15laR AAGGCGCGCCCAACCTCAGAAATCCAAAATTCAAGGGAAG

**Primers for cloning danio rerio saa CDS**

P7 drSAA pME F: ccgccccctcaccATGAAGCTTCTTCTTGCTGTGCTGG  
P8 drSAA pME R: tcggcgccgccaccctTCAGTACTTTATGGGCAGGCCTTTAG

**qRT-PCR Primers**

Dr_l-plastin_F	TGTCTGTGCCCCGACACCAT	Kanther et al., 2014
Dr_l-plastin_R	GGCGGAGGCAGAGTTCAG	Kanther et al., 2014
Dr_gcsfa_F	GCTTTTTGATTGGTGTGCTATAATG	Statchura et al., 2013
Dr_gcsfa_R	CAACGATCCCCACTAATGTGAA	Statchura et al., 2013
Dr_elfa_F	CTTCTCAGGCTGACTGTGC	Marjoram et al., 2015
Dr_elfa_R	CCGCTAGGATTACCTCC	Marjoram et al., 2015
Dr_nfkbiaa_F	GCCGGACAGCCCTTAAATTC	Kanther et al., Gastro., 2011
Dr_nfkbiaa_R	TCATAAATACAATCGTCCTCAGACATG	Kanther et al., Gastro., 2011
Dr_lyzC_F	TCGTGTGAAAGCAAGACACTGGGA	Kanther et al., Gastro., 2011
Dr_lyzC_R	ACTCGGTGGGTCTTAAACCTGCTT	Kanther et al., Gastro., 2011
Dr_pglyrp2_F	TGCAGGAGGATTTCAACATTC	Oehlers et al., 2011
Dr_pglyrp2_R	CTGGGCAGCTGGTGGTACT	Oehlers et al., 2011
Dr_pglyrp5_F	GACACACAAACACCGTGGACAT	Oehlers et al., 2011
Dr_pglyrp5_R	CCCCATCCTCTGCCTTCATA	Oehlers et al., 2011
Dr_cpa4_F	GGATTCAGGGCTGGATTTCTG	
Dr_cpa4_R	CTCATCCAAAAGGTCCCTGCAC	
Dr_cpb1_F	GTC AAGGTGATGATTGATAATCTTCAG	
Dr_cpb1_R	GTATTCTTTCCAATCTTCAGAAGGTGC	
Dr_cel.2_F	GATGCACCTGGTAACTATGGAC	
Dr_cel.2_R	GGTGAATAATCTGGAAGTTGACACTG	
Dr_tnfaip3_F	GAACCAACGGAGATGGGAATTC	
Dr_tnfaip3_R	CTCCCAGTTCAGCGTGCTG	
Dr_18S_F	CACTTGTCCCTCTAAGAAGTTGCA	Kanther et al., Gastro., 2011
Dr_18S_R	GGTTGATCCGATAACGAACGA	Kanther et al., Gastro., 2011
Dr_mpx_1F	TCCAAAGCTATGTGGGATGTGA	Kanther et al., Gastro., 2011
Dr_mpx_1R	GTCGTCCGGCAAACACTGAA	Kanther et al., Gastro., 2011
Dr_ncf2_F1	CTGGATGCCATTCTGAAACATAAGCTG	Kanther et al., 2014
Dr_ncf2_R1	GATGGAACTTGTCTATTTGAGGCTG	Kanther et al., 2014
Dr_il1b_F	TGGACTTCGCAGCACAAAATG	Kanther et al., 2014
Dr_il1b_R	GTTCACTTACGCTCTTTGGATG	Kanther et al., 2014
Dr_tnfa_F	GCGCTTTTCTGAATCCTACG	Marjoram et al., 2015
Dr_tnfa_R	TGCCAGTCTGTCTCCTTCT	Marjoram et al., 2015
Dr_saa_F	CGCAGAGGCAATTCAGAT	Kanther et al., Gastro., 2011
Dr_saa_R	CAGGCCTTTAAGTCTGTATTTGTTG	Kanther et al., Gastro., 2011
Dr_nfkbiab_F	CTCACCGAGGACGGAGACA	Kanther et al., Gastro., 2011
Dr_nfkbiab_R	CTCTTCGGGATAACGCAATCA	Kanther et al., Gastro., 2011
Dr_p53_F1	ATAAGAGTGGAGGGCAATCAGCGA	
Dr_p53_R1	AGTGATGATTGTGAGGATGGGCCT	
Dr_baxa_F1	CGGAGATGAGCTGGATGGAAA	
Dr_baxa_r1	GAAAAGCGCCCAACTCTTCC	
Dr_bcl2a_F1	TCTTCGAGTTTGGTGGGACCATGT	Ji W., et al, J. App. Tox., 2012
Dr_bcl2a_R1	TACATCTCCACGAAGGCATCCCAA	Ji W., et al, J. App. Tox., 2012
Dr_fabp2_F	TCAACGGGACCTGGAAAGTC	Oehlers et al., 2011
Dr_fabp2_R	CCCATTTGTTCCATGAACCTCTC	Oehlers et al., 2011
mCherry_F	CCCCGTAATGCAGAAGAAGA	
mCherry_R	TCTTGGCCTTGTAGGTGGTC	
Dr_cldn15la_F	CACCACATCGACCCTGTATG	Clelland ES, et al.Gen and Comp Endo., 2010
Dr_cldn15la_R	TACCGGCTATTCTGCCTTTG	Clelland ES, et al.Gen and Comp Endo., 2010