

**Table S1. Primer sequences used in this study**

<i>hmox1a</i> ISH fwd	5' CATTAAACCCTCACTAAAGGGAACAGGACTTGGAGCACTTCTTCGG 3'
<i>hmox1a</i> ISH rev	5' TAATACGACTCACTATAGGGAGACAACCTCAAAGCGTTTATGGACAG 3'
<i>ctsl.1</i> ISH fwd	5' CATTAAACCCTCACTAAAGGGAAGATCAGAAACAGTGTGGATCATGC 3'
<i>ctsl.1</i> ISH rev	5' TAATACGACTCACTATAGGGCCTAGACAGGGGCATTAATAAATGAAAACAG 3'
<i>slc40a1</i> ISH fwd	5' CATTAAACCCTCACTAAAGGGAACAAACCTGTCGCCGAAGTTCAC 3'
<i>slc40a1</i> ISH rev	5' TAATACGACTCACTATAGGGATAATCCTCCCCTGCGATGG 3'
<i>calr</i> fwd	5' CACCATGACTGCGTTATCCCTACTGTTTATG 3'
<i>mTagBFP</i> fwd	5' CACCATGAGCGAGCTGATTAAGGAGAACA 3'
<i>mTagBFP</i> rev	5' TTAATTAAGCTTGTGCCCCAGTTTGCT 3'
<i>calr</i> NOKDEL NO STOP rev	5' GAGTTTAGAGTCTGTTTCCTCCTCCTC 3'
<i>calr3a</i> fwd	5' CACCATGCGGATCACTGCTGCA 3'
<i>calr3a</i> rescue fwd	5' CACCATGAGAATAACAGCCGCCGTGTGCTTTATTTCTGCACTGGC 3'
<i>calr3a</i> rev	5' GATCATCTAGACTACAATTCATCTTTAGGGAGCGCATCAT 3'
<i>calr3a</i> NOKDEL NO STOP rev	5' AGGGAGCGCATCATCCTCA 3'
<i>calr3b</i> fwd	5' CACCATGCAAATTTTATTATTACAGTTAATTTTCGGCT 3'
<i>calr3b</i> rev	5' GATCATCTAGACTACAGTTCGTCTTTCTGAAGCACATC 3'
<i>calr3b</i> NOKDEL NO STOP rev	5' CTGAAGCACATCCTCGTCTCC 3'