

S2 Table. Primer list and their sequences

Gene	Ensemble ID	Forward 5'-3'	Reverse 5'-3'
Hprt1	ENSMUSG00000025630	CGTCGTGATTAGCGATGATG	TTTTCCAAATCCTCGGCATA
Pabpn1	ENSMUSG00000022198	GCCTCACTTTTGAGGTGCTC	AGGGGAATACCATGATGTCG
Murf1	ENSMUSG00000028834	TCGTTTCGAGCCTTACCTGTT	AAGTGAAGCTGGCAGGTTCAA
Atrogin-1 (Fbxo32) Proximal	ENSMUSG00000022358	TGTGCTGGTGGGCAACATTA	GGTGATCGTGAGGCCTTTGA
Atrogin-1 (Fbxo32) Distal	ENSMUSG00000022358	CGTGTTAACTATGCACAGGGC	GCACATAATCTGTCCAACCTTCC
Psme3 Proximal	ENSMUSG00000078652	CCAGTTTTCCCATCACGATA	GAGCAGCAATGCAGAGACAC
Psme3 Distal	ENSMUSG00000078652	GGCAGGCTAATTGCAGAGAC	GCGAAGGTCAAACCCATAGA
Psm14 Proximal	ENSMUSG00000026914	GAATGGGATCCACAACCACT	ATCACAGTCACCCTGGCTTT
Psm14 Distal	ENSMUSG00000026914	TGATGTATTCTGAACAACCTTGG	TGGTGATGTGTGAGACACCTG
Rad23 Proximal	ENSMUSG00000003813	ATGAGAATCTGGCTGCCAAC	ACCCCCACCAACCTACTACC
Rad23 Distal	ENSMUSG00000003813	CCTCCCCTCCGTAGAGATGT	TTCCACCACCTTCTCTTTG
Arih2 Proximal	ENSMUSG00000064145	TTCTGCAACTTTGCTGGATG	CTGCTCCACATCACTGGCTA
Arih2 Distal	ENSMUSG00000064145	TGGAGGCTGAGATCGAAAAC	GCTGCTCTGCTATGTGCATC
Arih1 Proximal	ENSMUSG00000025234	GTCAAACACGACATTTTGT	CTATCCCCTTCTCCCTCAA
Arih1 Distal	ENSMUSG00000025234	GGAAAACGGCTCCTTCATAA	GGTTGGTTAATTCAGCTTGAAAA
Rbx1 Proximal	ENSMUSG00000022400	CACTGCATCTCTCGATGGCT	GGGTACGCCTTGCGGGAAG
Rbx1 Distal	ENSMUSG00000022400	GAACGAGTGACTGGCATCAA	TGCCAGCCAAGATTACACAG
Ubqln1 Proximal	ENSMUSG00000005312	ACATCAATGCAGCAATCGAA	ACATCAATGCAGCAATCGAA
Ubqln1 Distal	ENSMUSG00000005312	GTTGAATGTCGTGCTGTTCCG	GGCTCTTTTTACCCAAATG
Atg10 Proximal	ENSMUSG00000021619	AAGCAACATCACAATCGGAGT	CTATCCCCTTCTCCCTCAA
Atg10 Distal	ENSMUSG00000021619	CGCGTGTCTGTGGTGTGTAT	AACAGAGCAGTCGTGGGTCT
Atg12 Proximal	ENSMUSG00000032905	CCCAGACCAAGAAGTTGGAA	CAGCACCGAAATGTCTCTGA
Atg12 Distal	ENSMUSG00000032905	TAGAGGAGCCTCAGCCATGT	ACGGCCAGTTTTCAAGATA
Cyld Proximal	ENSMUSG00000036712	GCCTGGCTTTTCTTTGACAG	AAGAGTGCAGGTCCTCCAGA
Cyld Distal	ENSMUSG00000036712	TCAAAGGTGTCAGAGCATGG	TCCCCTAACATCTCCATCCA
Myh1	ENSMUSG00000056328	ACCTGGCCAAATTCGCAAG	TGGTCACTTTCCTGCACTTG
Myh2	ENSMUSG00000033196	TGAAGTGGAGGGTGAAGTAG	TCTGGTAAGTAAGCTCCTTC
Myh4	ENSMUSG00000057003	GAGTGAAGGAACTCACCTAC	TTTCACTTTAGTCTGTAGTTTG
Myh7	ENSMUSG00000053093	AAGGGCCTGAATGAGGAGTA	GCTTCCACCTAAAGGGCTGT
Tnnt1	ENSMUSG00000064179	GCTGGGAAGGGTTCGAGTTG	GGGCACTTTATTTGAGTTAC
F4/80	ENSMUSG00000004730	CTTTGGCTATGGCTTCCAGTC	GCAAGGAGGACAGAGTTTATCGTG
MCP-1	ENSMUSG00000035385	CACTCACCTGCTGCTACTCA	GCTTGGTGACAAAACTACAGC
TNF α	ENSMUSG00000024401	GATCGGTCCCAAAGGGATG	CACTTGGTGGTTTGTACGAC
NF- κ B	ENSMUSG00000028163	CAGCTTTACAGAGTCTCTTAC	CTTTGGATTCGCTTTGCCTTC
EGFP	AAV-CMV-GFP vector	GGTCGGGGTAGCCGCTGAAG	AGCTGGACGGCGACGTAAC