

**Table S8 - Oligonucleotides, related to Key Resource Table**

Oligo name	Sequence	Use and additional information
G3BP1_gRNA4_F	caccTCATGCAGCCATACAAACCC	Cloning of G3BP1 gRNAs into px458 Cas9 expression plasmid
G3BP1_gRNA4_R	aaacGGGTTTGTATGGCTGCATGA	
G3BP1_gRNA5_F	caccTCCATGAAGATTCACTGCCG	
G3BP1_gRNA5_R	aaacCGGCAGTGAATCTTCATGGA	
G3BP_5AoH_v15_NdeI_F	TCAGAGCAGATTGTA CTGAGAGTGCAC <b>CATATG</b> TCCCCGGCCCTTAGTTTGCTAGTCCT	Amplification of homology arms for donor G3BP1-APEX2-GFP donor plasmid
V5_loxP_1-15_R	TGCTATACGAAGTTATcgtagaatcgagaccgaggagagggtagggataggcttaccGA	
G3BP_3AoH_SP_Sall_F	cggcatggacgagctgtacaagtaa <b>GTCGAC</b> ATCTTCATGGATCTTCATGCAGCCATACA	
G3BP_3AoH_v12_HR_SphI_R	AGCTATGACCATGATTACGCCAAGCTT <b>GCAATG</b> CCATCAATAAAAGAGAACCATAAC	
G3BP_intmap_F1	AGCCACTGAAGAACCCAGAA	Integration mapping of APEX2-GFP into <i>G3BP1</i> locus
attB1_UBAP2L_F	GGGGACAAGTTTGTACAAAAAAGCAGGCTTCACCATGATGACATCGGTGGGCACTAACCG	Cloning of full-length UBAP2L into pDONR221 gateway plasmid
attB2_UBAP2L_R	GGGGACCACTTTGTACAAGAAAGCTGGGTTTTActtgtagagctgctcatgccc	
UBAP2L_deltaUBA_F	AAGGATGGTGGCCAGAC	Deletion of UBA domain in UBAP2L by PCR
UBAP2L_deltaUBA_R	GTTTTGAGGTTGTTCCAG	
UBAP2L_intseq_F1	TCTGCTCAAGGAATGGGAAC	Sequence verification of cloned UBAP2L constructs
UBAP2L_intseq_F2	ACAGATGTCGCCTGGATCTT	
UBAP2L_intseq_F3	TCCATTCTTCCTCCAGCACT	
UBAP2L_intseq_F4	TCCTTCAACTTGCCTTCAGC	
pLKO.1-shRNA-control	AACAAGATGAAGAGCACCAACTCGAGTTGGTCTCTTCATCTTGT	non-targeting, scrambled siRNA
UBAP2L-Sh3	CCGGGCCAATACTGATGATACTATCTCGAGATAGTTATCATCAGTATTGGCTTTTT	siRNA against UBAP2L, TRCN0000007680, targets NM_014847.2-671s1c1
UBAP2L-Sh4	CCGGGCGCAGCAGAATACCCTTTCATCTCGAGATGAAAGGGTATTCTGCTGCGTTTTT	siRNA against UBAP2L, TRCN0000007681, targets NM_014847.2-2145s1c1