

Table S2	Primers, RNAi, siRNA and CEP90-GFP RNAi resistant sequences	
	Primer <i>Paramecium</i>	
Constructs	Primers	
CEP90a-GFP	CEP90a sens	caaatcatttaataataaactactagTATGAGTACGAAGAGAAAAGACATCATAAAAC
	CEP90a anti-sens	CTTCTCCTTTAGACATgggtacctcgagTCCTCCTCTTTATCTGTTTTTGTTC
EP90a-GFP RNAi resistant	CEP90a-GFP RNAi resistant sens A	GGATAGAGTATAGAATATCTATGAAGATACATTGGCTAATTGAAAAGCCACAAAACATGAAAACG
	CEP90a-GFP RNAi resistant antisens A	CGTTTTTCATGTTTTGTGGCTTCAAAATTAGCCAATGTATCTTCATAGATATTCTATACCTATCC
	CEP90a-GFP RNAi resistant sens B	GGATAAAACCCTAACCTCACTCTACCTCGTCCCATATTGAGGAAAAGGATAGAGAAAATTTTG
	CEP90a-GFP RNAi resistant antisens B	CAAAAATTTCTATCCTTTTCTCAATATGGGCGACGAGGTAGGAGTGGGTTAGTGGGTTTTATCC
RNAi CEP90	CEP90a sens	CCATTTAAAAAGGAAGGGGAATTTAGAAAATTTGGCCAATCTTAAAGCTACAAAGCATG
	CEP90a antisens	CACCGCGGTGGCGGCCCTCTAGAAGTACGAGATAGGAATGActaanaataaag
	CEP90b sens	CCATTTAAAAAGGAAGGGGAATTTAGAAAATTTGGCCAATCTTAAAGCTACAAAGCATG
	CEP90b antisens	CATGCTTTGTAGCTTAAAGATTGGCCAAGTTCTAAAATCCCCTCTCTTTTAAATGG
	RNAi <i>Paramecium</i>	
RNAi CEP90a	CTTTGGCCAATCTTAAAGCTACAAAGCATGAAAATGAAATGTAAAGGAGAAGATCAACGTGTTGAAGGCAGAGTATTATAAGTGTAGGTAGAGGCTAAGGAATAGATGAGCAGCATAAATGCTTAATGTCAAGTTGCAAAAAGAACAATTAACATAATATGAAGGAATGAAAAAGAAATGATGATGC CATAATGAAATCAGCAGGCAATGAATATGATGCAATGAATCCTTTATTGGGATTCATGGGCACTGTACCTACATCTTCAAAAAGAAGATTCAACAGGCATTAATCTCGCTTAGAGATTGCAAGCAAAAATAAAGAGAATCAGAGGAATTGCAAAAGACAATTAAGAGATAAGTCATAAGAGATTGAGAGA CTATAGGAAGAGACCAAAATATAAAGAGATGACTTGACAAAACACATTAACGtaaatattcattanaatcttttttagTCATTCCCTATCTCGTA	
RNAi CEP90b	GATTCGTATCCATAGCTGATATTGAGAATTTTAAATGAGAAGAGACATAATAGAGGAGGGGACTCACGACACAGTCAATATGAAAAATgtattataattgattcaataaagAAATTTCTTCTGTAGTGGGCATGCAAGAGAAAATAAATAGCATTTCTAAATGCAGAAAATAAAGCGGATTCAGCAGCTAACGATGCT GATAGACAAAGGATTTTGTCTAATCATAGAATTGAACTGATAAGCTTTTAAAGTGAATCAAAACACATTAAGTCAAGATGATATATAAAGAACTCAATGGCAGGAATAAGGAGGCTTTGGCATAAGTCAGAGACATGTTAGCTGGGTTAGTCCAGAGGTTGTTTTATTGAGATTGAGAGATATGAA TGAGAAGGAGATGCCATCTAAGATTGGTGTGGTTTAGGTTTGGGAGATTGTGTATCCATTTAAAAAGGAAGGGGAATTTAGAAA	
	RNAi resistant CEP90-GFP	
EP90a-GFP RNAi resistant	ATGAGTACGAAGAGAAAAGACATCAAAAACCTTATGAAATCGATGAATATAGATCCAACCACATTTTCTGAGGAAGATATAAGATAATTTGAATAAAGGCTAAGTGATGATGAGTACAGTGAATCAGATAGTATGAGGGATTCCGTTATCCATAGCTGATATTGAGAATTCAATAGACTAAACATAACA GAGGGGGAAACACTCATGATACAGTCAATATGAAAAATGATTTATTGTAATCGATCCATTTTAGAAATTTATCCTCGGTTGGGCTGCAGGAAAAATAAATAGCTTTTCTAAATGCTGAGATCAAAAGGATCCAAGCAGCAATGACGCTGATAGACAAAAGATTTTTGCTAATCATCGAATTTGAAACA GATAAACCTTTAAGTGAAATCAAATAACTAAAGTCTAAGATGATCTATCAAGAGTCTCAATACCAGGCATAAGAGAAGCTTTGGCTAAGTTAGAGATATGCTTGGTGGATGGTCCAGAGGCTGTTTATCTGAGGTGGGAGATGAATGAGAAGGAAATGCCCATCAAGATTGGGTTA GGTTTTGGGAAATTGGTATCCATTTCAAAAAGGAGGGGGAGTTTTAGAAAAAGGAATATTGGCTTTAAGGGAAGAAGCTCAGATAGATAACAGAGAAGCATAAATTCTTATTGAATGATTTGGAACATGGCTAAAAGATGATGGTAGACAGAGAAGGAGGATTTGAAGACATAAATTAATTTAGTAAAT GCTAGAAAAGGCTTTGGAGTTAGAATTAAACAAATCTTAAAGGAATTAGCCCTGTTGAGAGAGAAGGGAGCAAGATTGATGAATTAAGTAGGATTAAAGAGATTGGAGTAAAGAGAAGTTTTTTATTGGAAGAGAAGGCTGGTTTCTATCAAAAATAAAGCCGGAGACAAGGCAGGTGATTAATAC AAGGCATAGGATGACCCAAAGGAAGGGAGACCTTTGCAATTAAGACAAGGAATTTGACTAAGGAGAATTTAACTTTTGGAGAAGGTTAAGAGATTGGAGGACAAAATAGATAGGACAGAGAAGGAGTATTGGAAGCAAAAACCTAAGCTTAAGAATATCTATTTAATTTCAATTTCAAAA CAGATTAGACTCAGGCTTATGAAAAAGAAATTTACTCAGAAATTCAGATCTTAAAGAGAGAAGCCTCATGATACAGTCAATATGAAAAATGATTTATTGTAATCGATCCATTTTAGAAATTTATCCTCGTGGTGCAGGAAAAATAAATAGCTTTTAAATGCTGAGATCAAAAGGATCCAAGCAGCAATG AAAATCAAATTTATGATCATTGCTAATGATGATAAGAACTTAAAGAAAAATAGATGGGGACTTATCTGAATAGAGAATTCATTAAGATTGAAGGTGGAAGAGTTGGATAGAGTATAGAATATCTATGAAGATACTATGGGCTAATTTGAAAGCCACAAAACATGAAAACCGAGATTTGAGGG AAAAATCAATGTCTTAAAAGCCGAATATTAAAATGCTAAGTTCGAGGCCAAGGAATAAATGTCAGACTCAAGCTTAACTTTAAGTCCGCAAGAAATAATTTGACTAATGAGGAAATCGAAAAGGAAATCGATGATGCTATTATGAAAGTCAAGCCGAAATACGATGCTATTATGAAAGTCAAGG ACCCTTTATTGGGATTCATGGGAACAGTCCCAACATCATCTAAAAGGAGAATTCATAAGCATTGAACCTCGCCTAAAGACTTTAAGCAAAAGCAAAAGAGAAGGCAAGGAGCTTTAAGACAATTGAGAGACAAAATCACAAGAAATCGAGAGCTTTAAGAGGAAAACAAAATTCAAAAGA GATGCTTTGGATAAAACCCACTAACCTCACTCTACCTCGCTGCTATGAGTACGAAGAGAAAAGACATCAAAAACCTTATGAAATCGATGAATATAGATCCAACCACATTTTCTGAGGAAGATATAAGATAATTTGAATAAAGGCTAAGTGATGATGAGTACAGTGAATCAGATAGTATGAGGGATTCGGT ATCCATAGCTGATATTGAGAATTATCAATAGACTAAACATAACAGAGGGGGGAACACTCATGATACAGTCAATATGAAAAATGATTTATTGTAATCGATCCATTTTAGAAATTTATCCTCGTGGTGCAGGAAAAATAAATAGCTTTTAAATGCTGAGATCAAAAGGATCCAAGCAGCAATG ACGCTGATAGACAAGAGATTTTGTCTAATCATCGAATTTGAAACAGATAAACTTTTAAAGTGAATCAAATAACTAAAGTCAAGATGATCTATCAAGAGTCTCAATACCAGGCATAAGAGAAGCTTTGGCTAAGTTAGAGATATGCTTGGTGGATGGTCCAGAGGCTGTTTATCTGAGGTGGCAGAT ATGAATGAGAAGGAAATGCCATTTCAAGATTGGGTTAGGTTTGGGTTTGGGAAATTTGGTATCCATTTCAAAAAGGAGGGGGAGTTTTAGAAAAAGGAATATTGGCTTTAAGGGAAGAAGCTCAGATAGATAACAGAGAAGCATAAATTCTTATTGAATGATTTGGAACATGGCTAAAAGATGATGGTAG ACAGAGAAGAGGATATTAGAAGACATAAATTAATATGATAATGCTAGAAAAGGCTTTGGAGTTAGAATTAAACAAATCTTAAAGGAATTAGCCCTGTTGAGAGAGAAGGGAGCAAGATTGATGAATTAAGTAGGATTAAAGAGATTGGAGTAAAGAGAAGTTTTTTATTGGAAGAGAAGGCTGGTT TCTATCAAAAATAAATTAAGCCGGAGACAAGGCAGGTGATTAATACAAGGCATAGGATGACCCAAAGGAAGGGAGACCTTTGCAATTAAGACAAGGAATTTGACTAAGGAGAATATTAACTTTTGGAGAAGGTTAAGAGATTGGAGGACAAAATAGATAGGACAGAGAAGGAGTATTGGAAGCAA AAAACCTAAGCTTAAAGAAATATCTATTTTAATTACTCAATTTAAAACAGATTAGACTCAGGCTTATGAAAAAGAAATTTACTCAGAAATGCGAGATCTTAAAGAGAAGCCTCATGAAATTGGAATTTAGATTGATTTATGAGACTCAAATCAAAATCTTGAAGGATGCAAAAGGAG GAAATTTAACTTCGAAAAGATAATCTAAGAGGGCAAGTGAAGGAAAAATCACTTTATATGATCATTTGTCTAATGATTTATAGAACTTAAAGAAAAATAGATGGGACTTATCTGAATAGAGAATTCATTAAGATTGAAGGTGGAAGAGTTGGATAGAGTATAGAATATCTATGAAGATACATTGG CTAATTTGAAAGCCACAAAACATGAAAACGAGATGTTGAGGGAAAAAATCAATGTCTTAAAAGCCGAATATTAAAATGCTAAGTTCGAGGCCAAGGAATAAATGTCAGACTCAAGCTTAACTTTAAGTCCGCAAGAAATAATTTGACTAATGAGGAAATCGAAAAGGAAATCGATGATGCTATTAT GAAGTCAGCCGAAACGAATACGATGCTATGAACCTTTATTGGGATTCATGGGAACAGTCCCAACATCTATAAAGGAGAATTCATAAAGCAATTGAACCTCGCCTAAAGACTTTAAGCAAAGCAAGAGAAGGCAAGGAGCTTTAAGACAATTGAGAGACAAATCACAAGAAATCGAGAGACTTTAA GAGGAACCAAAATACAAAGAGATGCTTTGGATAAAACCCACTAACCTCACTCTACCTCGTCCGCTAATTTAGGAAAAAGGATAGAGAAAATTTGAAATATAAATCCCCTTTTAAAGAAAAATGGATTAGGATTTATAGATCCTAAAAGCAGAAAACGATGATGAGCAATGTAATTTATTAGTATAAAAT TTAATAGAGATTCTATGCGAGCTGAAGAGGATCTATAGAGATTGAGAATTTAAAAGACAGAACCTACAAAACATTTAGAACATTTTGGATTGGATTGCCACTGGTATTAGAATGATATGAGATAAAATCTGAGAAGTCCATAAATGAGATGTCGGAAGCCTAAAATCAAAAGACATATATTGATCCTCAAA GTGCGATCAAAAAGGGATGAAATTTGCATTAATTTGCAAGGTGGAATTTCAAGTAGTTAATAAAAAAGGAAGATGTTCCCTTTGGTATTCAAAAATGAAACAAAACAGAATAAAGGAGGAGGACTCGAGGTACGATGCTAAAGGAGAAGAAATTTACTACTGGTGTGTTCCAAATTTCTGTTGA ACTTGATGGTATGTTAATGGACATAAAATTTCTGTTCTGGTGGGGTGAAGGTGATGCAACATATGAAAAATTAACCTTAAAATTTATTGCACTACTGGAAAATTAACCTGTTCCATGGCCAACACTTGTCACTCTTTAACTTATGGAGTTCAATGTTTTTCAAGATACCCTGATCATATGAAACAACAT GACTTTTCAAACTGCTCCATGCCAGAAGGATATGTCGAAGAAAAGAACTATATCTTCAAAAGATGATGGAACTACAAAGACAAGAGCTGAAGTCAAATTTGAAGGAGATACCTTGTCAATAGAATTTGAGTTAAAAGGAAATGATTTTAAAGAAAGATGGAACATTTTAGGACATAAATTTGGAATACAACATA TAACCTACATAATGATACATCATGCGAGACAACAAAAAATGGAATCAAATCAACTCAACTTAAAGATAGACACAACATTAAGATGGATGATCAGTTCAATAGCAGACATTATCAACAAAATACTCCAATTTGAGATGGCCCTGTTTTATTACCAGACAACCTACTTATCAACACAATCTGCCCTATCAAA AGATCAAATGAAAAGAGAGCCATATGGTTTTATTAGAGTTTGTAACTGCTGGAATACACATGGCATTGATG	
	siRNA mammalian cells	
siRNA CEP90 #1	siGENOME SMARTpool siRNA D-020125-01, PIBF1 Dharmacon	GAGAUUAGACAACCAUUG
	siGENOME SMARTpool siRNA D-020125-02, PIBF1 Dharmacon	ACAGGUUAUCUAUUGAAUC
	siGENOME SMARTpool siRNA D-020125-03, PIBF1 Dharmacon	UCGUUUAAGAUGCAUAGUAA
	siGENOME SMARTpool siRNA D-020125-04, PIBF1 Dharmacon	GAUCAGUCUUAGACAGGU
siRNA CEP90 #2	based on siRNA CEP90#1 (Kodami <i>et al.</i> 2015) Dharmacon	TCTGCAAGAGGAAACAGCAAGAAAT
siRNA FOPNL #1	based on siRNA FOR20#2 (Sedjai <i>et al.</i> 2010) Dharmacon	GTATTATAAAGGCCCTTAA
siRNA FOR20 #2	siGENOME SMARTpool siRNA D-016243-01, FOPNL Dharmacon	GUACUUAACAUUGAAGACUCU
	siGENOME SMARTpool siRNA D-016243-02, FOPNL Dharmacon	GCCAAUGGAUGACCACCUA
	siGENOME SMARTpool siRNA D-016243-03, FOPNL Dharmacon	GAUCCGAGCUGAAGUUUUC
	siGENOME SMARTpool siRNA D-016243-04, FOPNL Dharmacon	GCCAUUUCUUGCGUGGAA
scrambled control	siGENOME Non-Targeting siRNA Pool #2 Dharmacon	UAAGGCUAUGAAGAGAUAC AUGUAUUGGCCUGUAUUG AUGAACGUGAAUUGCUAA UGGUUUACAUGUCGACUAA