

## Supplementary table 1: Designed primers and ShRNAs

Function	Location	Sequence forward	Sequence reverse
ChIP <i>GNL3</i> locus	<i>GNL3</i> -0.5	AGGCCCTGAGCAACGGAGGAA	GCGCACTACGGGTCCGAAACTC
ChIP <i>GNL3</i> locus	<i>GNL3</i> -3.5	CCTGCCCAACTGCCCCCTAGTC	GGGGGAGGGTGTTTTCCAGACCT
ChIP <i>GNL3</i> locus	<i>GNL3</i> -6.5	TCCTGCTTGGGCCTGGTGTGGA	GCTACCTCCCCTCCAGCAGTGT
ChIP <i>GNL3</i> locus	<i>GNL3</i> +0.1	CCAGCGGAGGCAGGTTGATGTG	TGGCTGCAGCAACTCCAGACG
ChIP <i>GNL3</i> locus	<i>GNL3</i> +0.4	TTAACCGCGCGGGCTCATTCTG	CAGCTCTCACCTGGGCCAGTCT
ChIP <i>GNL3</i> locus	<i>GNL3</i> +3.5	GCCTCCGATGTTGTCCTAGAGGTGTT	TCCCCACTGCCTAGCACTGTCTC
ChIP <i>GNL3</i> locus	<i>GNL3</i> +5	TGGGCTCTGGAGCCTGATTGCT	AGCATTCTTCTTTGCCTTCACACGCT
ChIP <i>GNL3</i> locus	<i>GNL3</i> +9	CCAAGGTGGCGGACATTCCACA	AGCAGAACCCTGGCTGGTAGCAT
<i>CTCF</i> control	<i>CTCF</i> 1	GGCCAGGACTCCACGTTTCTAGA	GCCCTCTGGTGTTTGGCAGCAA
<i>CTCF</i> control	<i>CTCF</i> 2	CACCCAGCAGAGGGCCAGATA	CCCTTCGCCTTCTCTCCAGCCA
ChIP <i>NPM1</i> gene	<i>NPM1</i> +1	GCCTGCTTGTGGAGCGGGTAGA	GCCGAAGCACGCGAGGTAAGTC
ChIP <i>ID2</i> locus	<i>ID2</i> -1.7	AGGCTCGAACTGTGGGAGGACT	CTGCCTGCGACTCTGTCCCTGA
ChIP <i>ID2</i> locus	<i>ID2</i> -1.4	GGAAGGCCCTCCGCAAACCTTCT	TGACAGCTATGCGCCCCATGAC
ChIP <i>SEPX1</i> pro	<i>SEPX1</i> -0.3	CGCGGAAAGGCTGCATGACCTC	CGCGAATCCGTAGGGTCGTGTC
ChIP <i>FOSL1</i> locus	<i>FOSL1</i> +1.15	GCCCTCGATCCCTTTGCCGAATG	AGGAAATGGGCACCTGCAGCCT
ChIP <i>FOSL1</i> locus	<i>FOSL1</i> -37	CGGGGATCAAAGATGAAGAA	TGGGGAGCAGATAGCTGAGT
ShRNA	shPIM1	ACATCCTTATCGACCTCAATCCTCGAGGATTGAGGTCGATAAAGGATGT	
ShRNA	shPIM2	GATGAACCCTACACTGACTTTCTCGAGAAAGTCAGTGTAGGGTTCATC	
ShRNA	ShMYC	CCTGAGACAGATCAGCAACAACCTCGAGTTGTTGCTGATCTGTCTCAGG	

## Supplementary table 2: Western Blotting antibodies

<b>Antibody</b>	<b>Catalogue</b>	<b>Company</b>	<b>Block</b>	<b>Primary</b>	<b>Secondary</b>
Anti-H3	ab1791	Abcam	5% Milk	1:100000	1 in 10,000
anti- $\beta$ -actin	A1978	Sigma Aldrich	5% Milk	1:100000	1 in 10,000
anti-BAD	9239	Cell Signaling Technology	5% Milk	1:1000	1 in 10,000
anti-BADS112p	5284	Cell Signaling Technology	5% BSA	1:1000	1 in 10,000
anti-c-MYC	sc-764	Santa Cruz Biotechnology	5% BSA	1:3000	1 in 10,000
anti-PIM1	2907	Cell Signaling Technology	5% Milk	1:500	1 in 10,000
anti-PIM2	61159	Active Motif	5% BSA	1:3000	1 in 10,000