Supplementary Materials

NPM-ALK Is a Key Regulator of the Oncoprotein FOXM1 in ALK-Positive Anaplastic Large Cell Lymphoma

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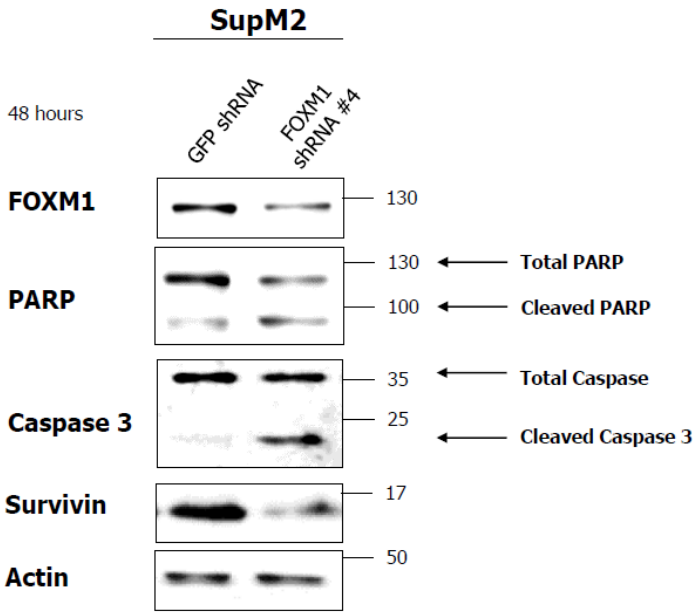


Figure S1. Downregulation of FOXM1 induces apoptosis. Western blot analysis of SupM2 cells infected with FOXM1 shRNA for 48 hours showed cleavage of PARP and caspase 3, markers of apoptosis. Moreover, the expression of an anti-apoptotic protein, Survivin, was dramatically reduced. β-actin served as the loading control. Data are representative of three biological replicates.

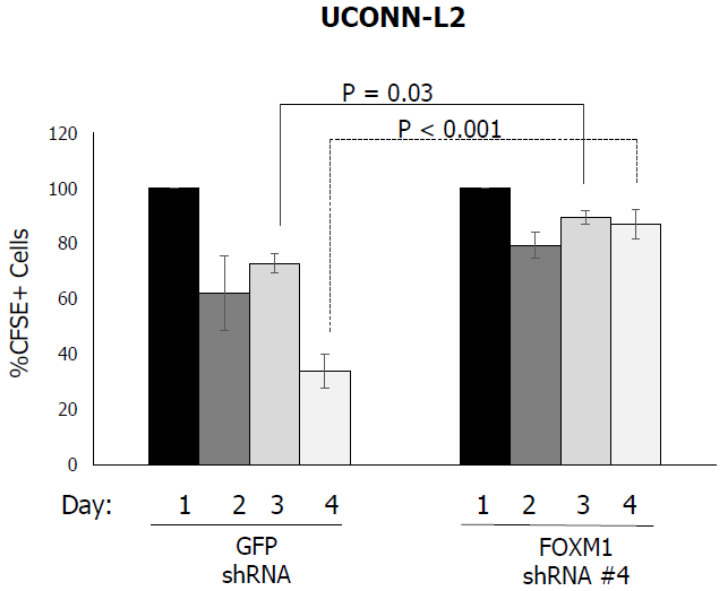


Figure S2. FOXM1 shRNA significantly inhibits cell division in UCONN-L2. Infection of UCONN-L2 with FOXM1 shRNA significantly preserved the CFSE content, as compared to cells treated with GFP shRNA on day 3 and day 4. Data are representative of two biological replicates.

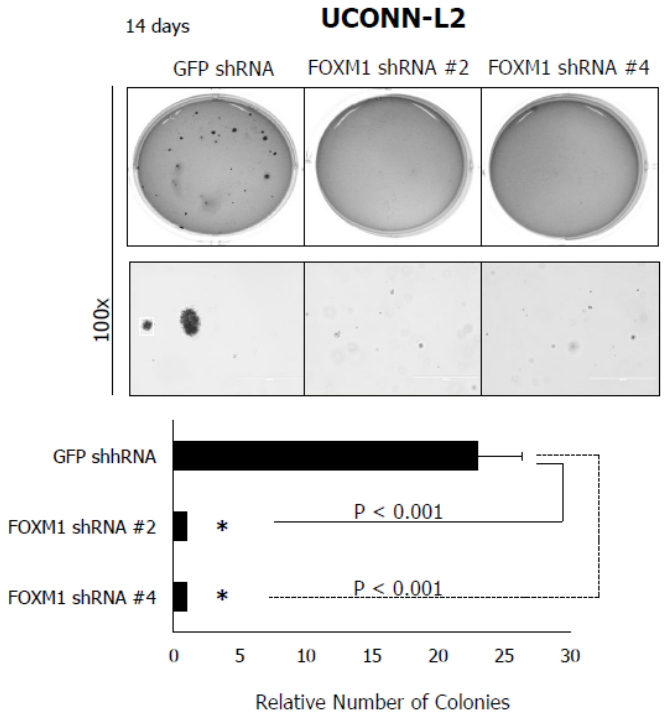


Figure S3. shRNA knockdown of FOXM1 largely abrogates soft agar colony formation in UCONN-L2 cells. Soft agar colony formation of UCONN-L2 cells infected with either GFP shRNA or FOXM1 shRNA was evaluated. The boxed area (middle right panel) shows the cut-off size for a colony to be counted. Data are representative of two biological replicates.

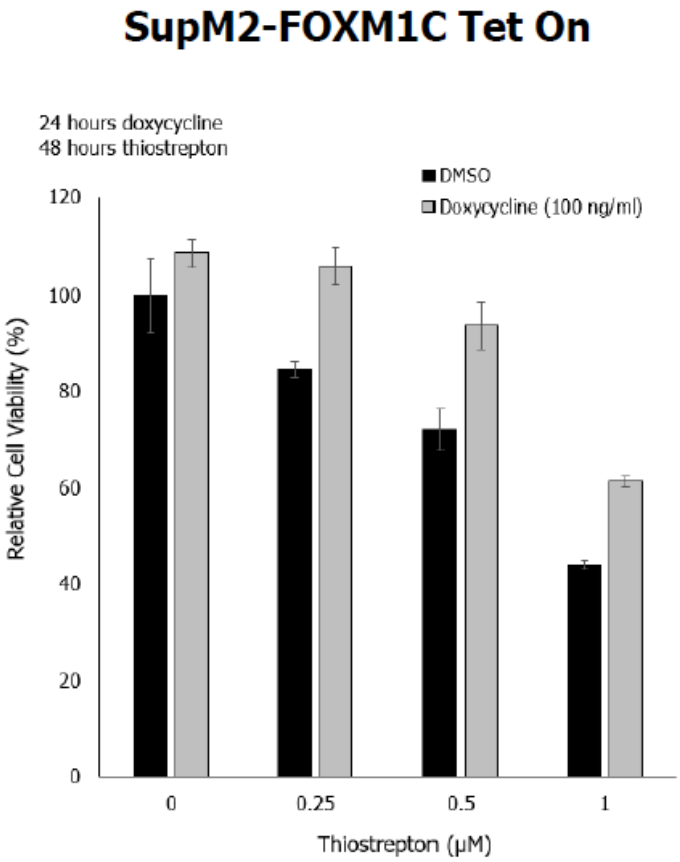


Figure S4. Overexpression of FOXM1 provides resistance to thiostrepton mediated growth inhibition of FOXM1 in a tetracycline inducible FOXM1 SupM2 cell line.

Figure 1A

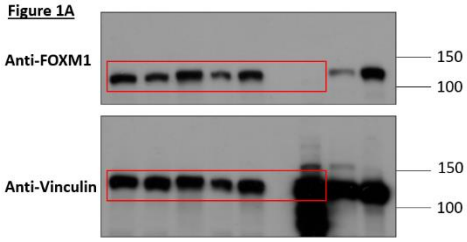


Figure 1B

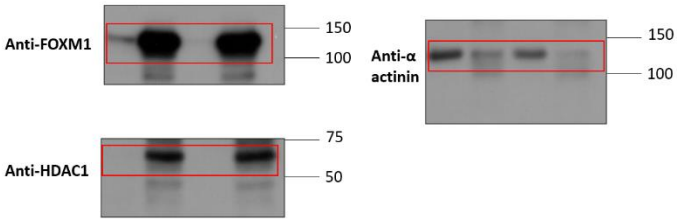


Figure 3B

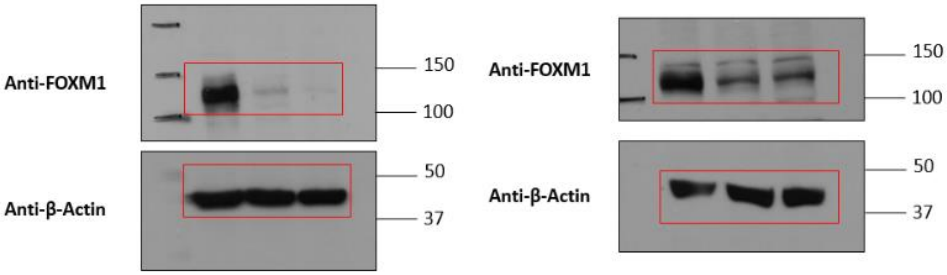


Figure 4B

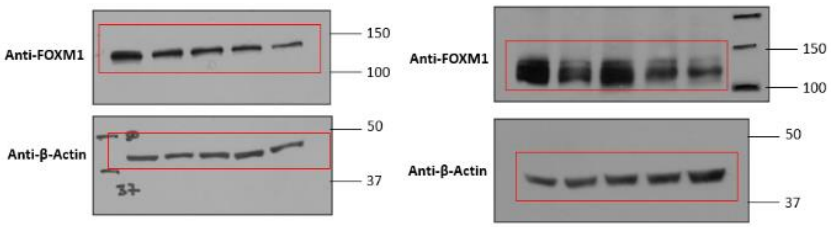


Figure 4C

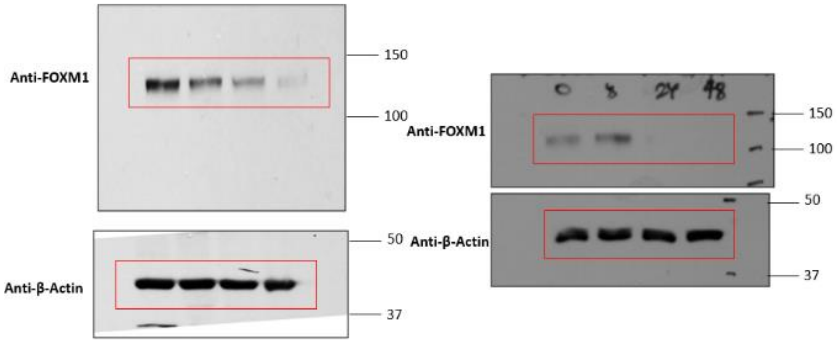


Figure 5A

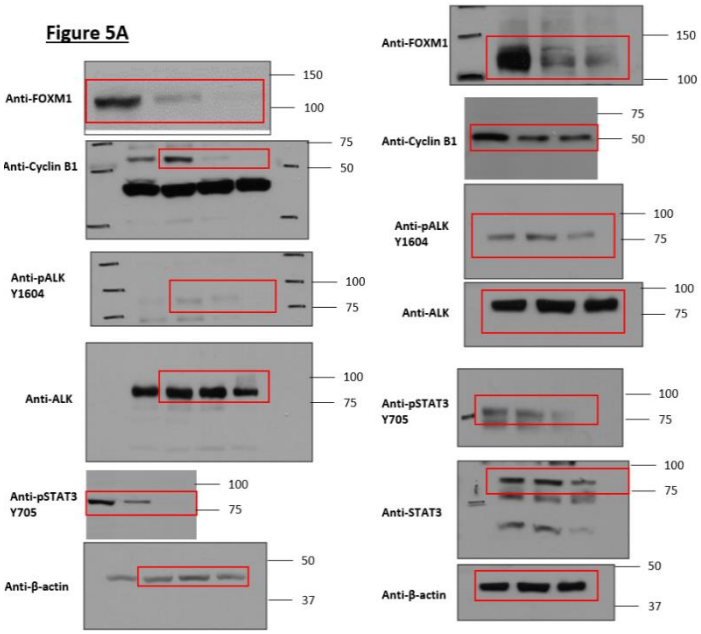


Figure 5B

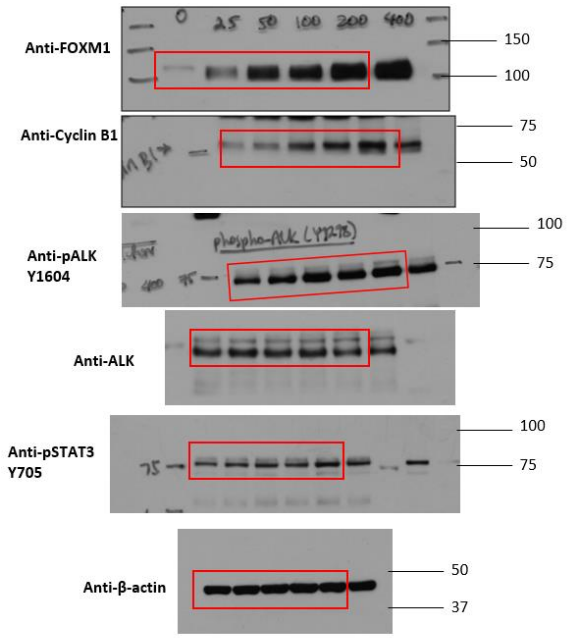
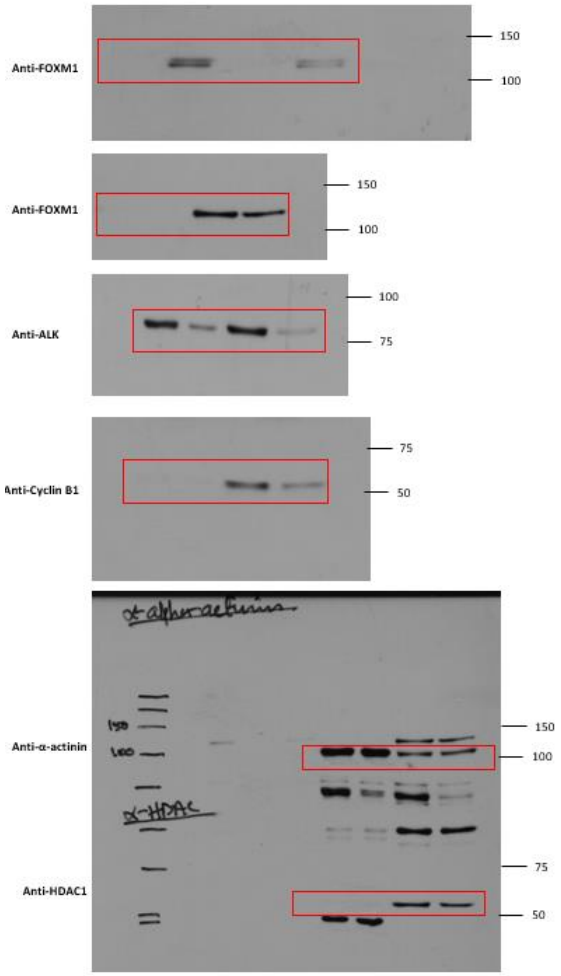


Figure 6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100
Anti-FOXM1
150
100
Anti-ALK
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Anti-Cyclin B1
75
50
α-alpha-actinin
Anti-α-actinin
150
100
α-HDAC
Anti-HDAC1
75
50

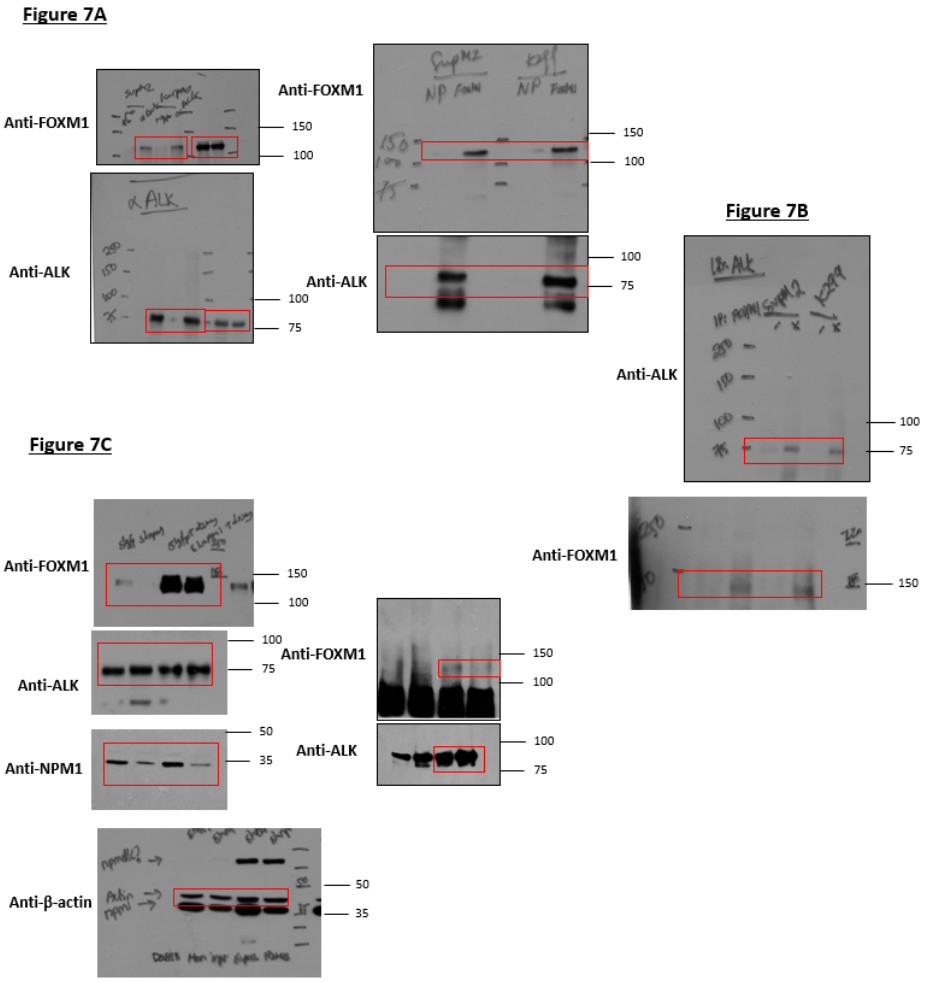

Figure S5. Uncropped western blot films.

Table S1. PCR primer sets used in the study.

RT-PCR Primer Sequences (Figure 1B)	
Primers	**Sequence**
FOXM1-isoforms (F)	CACCCCAGTGCCAACCGCTA
FOXM1-isoforms (R)	AAAGAGGAGCTATCCCCTCCTCAG
GAPDH (F)	GGTCTCCTCTGACTTCAACAGCG
GAPDH (R)	ACCACCCTGTTGCTGTAGCCAA
Quantitative RT-PCR Primer Sequences (Figure 2A)	
Primers	**Sequence**
FOXM1 (F)	CGTCGGCCACTGATTCTCAAA
FOXM1 (R)	GGCAGGGGATCTCTTAGGTTC
GAPDH (F)	GGTCTCCTCTGACTTCAACAGCG
GAPDH (R)	ACCACCCTGTTGCTGTAGCCAA
ChIP PCR Primer Sequences (Figure 6C)	
Primers	**Sequence**
Cyclin B1 Prom 1 (F)	CGCGATCGCCCTGGAAACGCA
Cyclin B1 Prom 1 (R)	CCCAGCAGAAACCAACAGCCGT
Cyclin B1 Prom 2 (F)	CCTCCAACCCAGAGAGTTGTTGC
Cyclin B1 Prom 2 (R)	AGCCAAGGACCTACACCCAGCA

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