

## Supplementary Information; Olanich et al.

### Supplementary Figure legends

**Supplementary Figure 1** Total numbers of cellular NPM mRNAs remain unchanged in response to rapamycin treatment, FBP1 overexpression, or FBP1 depletion. NPM mRNA was measured by qRT-PCR from total RNA extracted from MEFs and was normalized to histone 3.3 mRNA. Fold change was calculated by the  $\Delta\Delta C_T$  method (Livak and Schmittgen 2001). Values are mean  $\pm$  s.d. of triplicate samples per condition from three independent experiments. (a) Rapamycin treatment does not affect total cellular levels of NPM transcripts. (b) NPM mRNA levels are unchanged upon overexpression of FBP1. (c) Depletion of FBP1 fails to affect total numbers of NPM mRNAs.

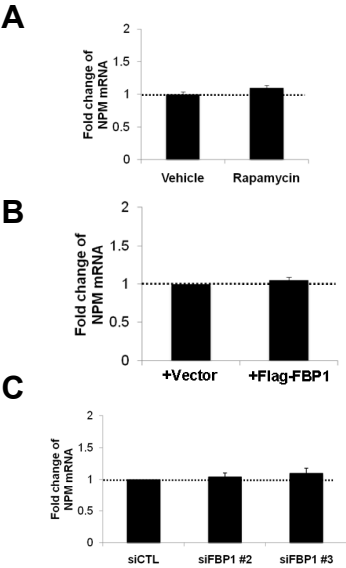
**Supplementary Figure 2** RACE results and chimeric reporters. (a) Sequences of the 5' and 3' UTRs of the NPM mRNA. (b) Schematic representation of UTR-firefly *luciferase* reporter constructs.

**Supplementary Figure 3** Database search results from mass spectrometry analyses. Shown are the complete peptide summaries for each of the proteins identified by mass spectrometry.

### SI References

Livak KJ, Schmittgen TD (2001). Analysis of relative gene expression data using real-time quantitative PCR and the  $2^{-(\Delta\Delta C_T)}$  Method. *Methods* **25**: 402-408.

# Olanich et al\_Figure S1





# Olanich et al\_Figure S3

Mass Spectrometry and Database Search Results  
 Database: nr\_20070218 20070218 (4641100 sequences; 1602026208 residues)  
 Database searching: MASCOT DISTILLER; MASCOT version 2.2.04.

Band	(Accession) Primary Protein Name	Protein Molecular Weight	Protein Score	Unique Peptides	Sequence	Mascot Ion Score	m/z (observed)	Mass (observed)	Mass (theoretical)	Mass Error (ppm)	Modifications
2	1: gi 19424312 KH-type splicing regulatory protein [Mus musculus]	74465.6	403	13	VQISPDSSGLPER	106	677.85151	1353.688468	1353.688797	0.2	Oxidation (M)
					VPDGMVGLIIGR	93	621.84839	1241.682228	1241.68013	1.6	
					AINQQTGAFVEISR	92	767.40545	1532.796348	1532.794647	1.1	
					QLEDGDQDPSK	78	616.27489	1230.535228	1230.536407	0.9	
					IINDLLQSLR	72	592.85438	1183.694208	1183.692444	1.4	
					IGGDAATTNNNTPDFGFGGQK	71	1091.0121	2180.009648	2180.013336	1.6	
					MILIQDGSQNTNVKPLR	69	1029.5323	2057.050048	2057.057495	3.6	
					IQNDAGVVR	69	436.73279	871.451028	871.451141	0.1	
					VGGGIDVPVPR	69	533.30605	1064.597548	1064.597778	0.2	
					MMLDDIVSR	66	556.25963	1110.504708	1110.504913	0.1	
					TSMTTEEYR	65	516.7182	1031.421848	1031.422958	1	
					QLPPNGDPNFK	62	613.81152	1225.608488	1225.6091	0.4	
					AWEEYYK	42	494.72421	987.433868	987.433762	0.1	
					34	494.72421	987.433868	987.433762	987.433762	0.1	
3	1: gi 37078458 Far upstream element-binding protein 1 (FUSE-binding protein 1) (FBP) 2: gi 74206095 unnamed protein product [Mus musculus] 3: gi 84662730 far upstream element (FUSE) binding protein 1 [Mus musculus] 4: gi 112180378 Far upstream element (FUSE) binding protein 1 [Mus musculus]	68668.08	317	19	ICGDAGTSLNSNDYGYGCGK	84	658.63336	1972.876252	1972.876175	1	2 Oxidation (M)
					SVQAGNPGGPGGGR	81	654.32676	1306.638968	1306.637726	0.9	
					IGGDAAGTSLNSNDYGYGCGK	76	987.44252	1972.870488	1972.876175	2.8	
					IAQTGPPDR	75	534.29547	1066.576398	1066.577087	0.6	
					RPLEDGDQDPAK	70	670.82509	1339.635628	1339.63678	0.8	
					MVMIQDGPQNTGADKPLR	67	868.32784	2001.961092	2001.961151	0	
					IGGNEGIDVPIPR	61	668.86449	1335.714428	1335.7146	0.1	
					LLDQIVEK	58	479.2845	956.554448	956.554214	0.2	
					RPLEDGDQDPAK	57	447.55273	1339.636362	1339.63678	0.3	
					IQNDAGVVR	55	436.73302	871.451488	871.451141	0.3	
					RLLDQIVEK	50	557.33525	1112.655948	1112.655319	0.5	
					SPPNADPNMK	46	592.27416	1182.533768	1182.533905	0.1	
					SPPNADPNMK	41	592.27544	1182.536328	1182.533905	2	
					QLIEEK	41	759.42438	758.417104	758.417389	0.3	
					EMVLELIR	39	509.78369	1017.552828	1017.552826	0	
					SVMTEEYK	37	501.726	1001.437448	1001.437531	0	
					ITGDPYK	36	793.40906	792.401784	792.401749	0	
					GTQQIDYAR	34	574.79065	1147.566748	1147.562164	3.9	
AWEEYYK	33	494.72437	987.434188	987.433762	0.4						
4	1: gi 4378711 nucleic acid binding factor pRM10 [Rattus norvegicus] 2: gi 5562845 heterogeneous nuclear ribonucleoprotein; type A/B hnRNP p40 [Rattus norvegicus] 3: gi 6754222 heterogeneous nuclear ribonucleoprotein A/B [Mus musculus] 4: gi 6911221 CArG-binding factor A [Rattus norvegicus] 5: gi 12851175 unnamed protein product [Mus musculus] 6: gi 13786156 heterogeneous nuclear ribonucleoprotein A/B [Rattus norvegicus] 7: gi 26345118 unnamed protein product [Mus musculus] 8: gi 27695334 Hnrpab protein [Mus musculus] 9: gi 74225210 unnamed protein product [Mus musculus] 10: gi 89275690 S1 protein C2 [Mus musculus]	34250.09	133	5	FVGGNLPTEATEEK	97	752.38812	1502.761688	1502.761597	0	Oxidation (M)
					EYVQQQQYSSGGR	71	750.34937	1498.684188	1498.680008	2.7	
					MFYGGLSWDTSKK	57	736.36707	1470.719588	1470.717651	1.3	
					MFVGGLSWDTSKK	40	491.24666	1470.718152	1470.717651	0.3	
					DLKDYFTK	40	515.2667	1028.518848	1028.517838	0.9	