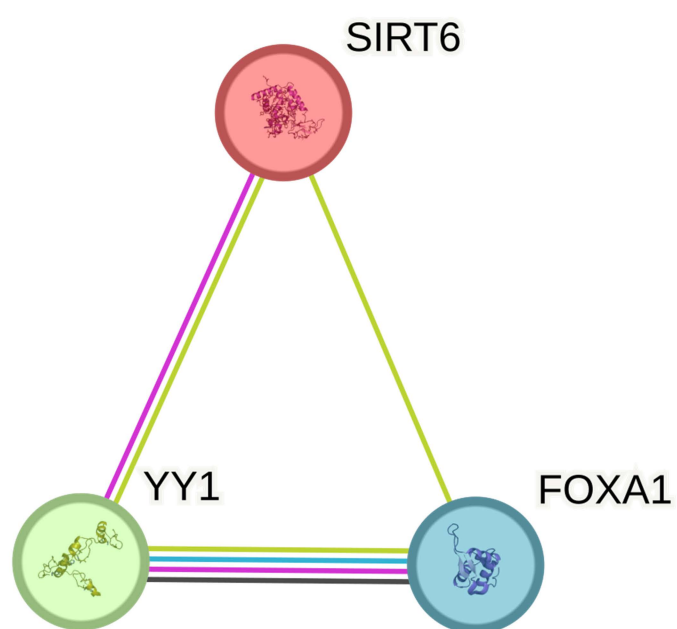
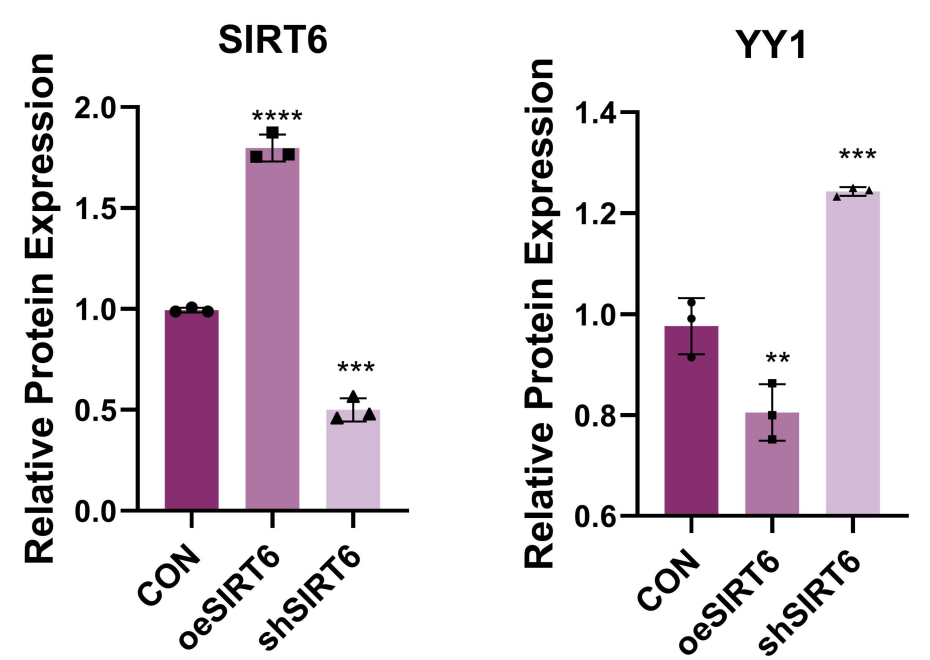
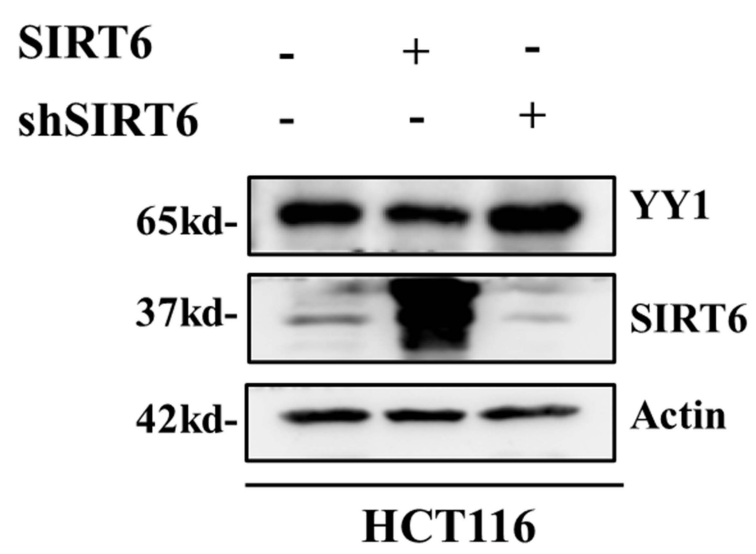


Supplemental Figure 1

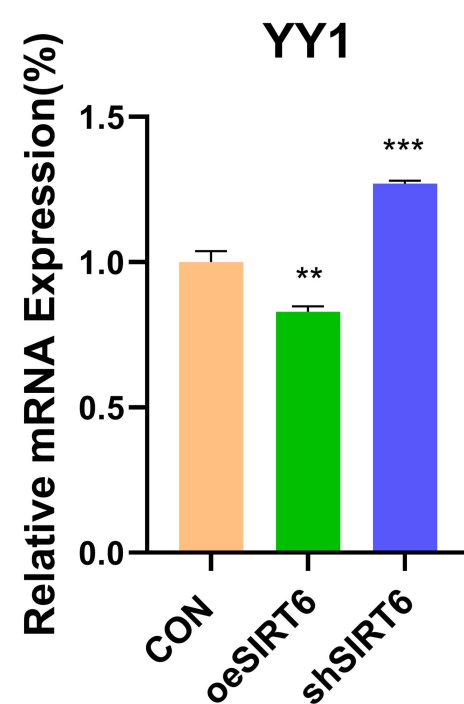
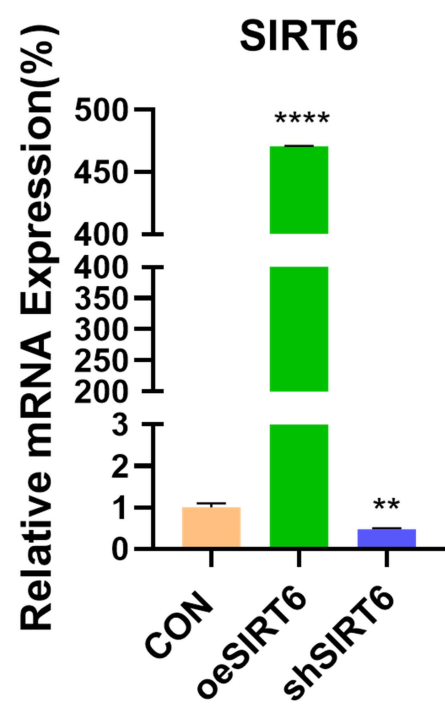
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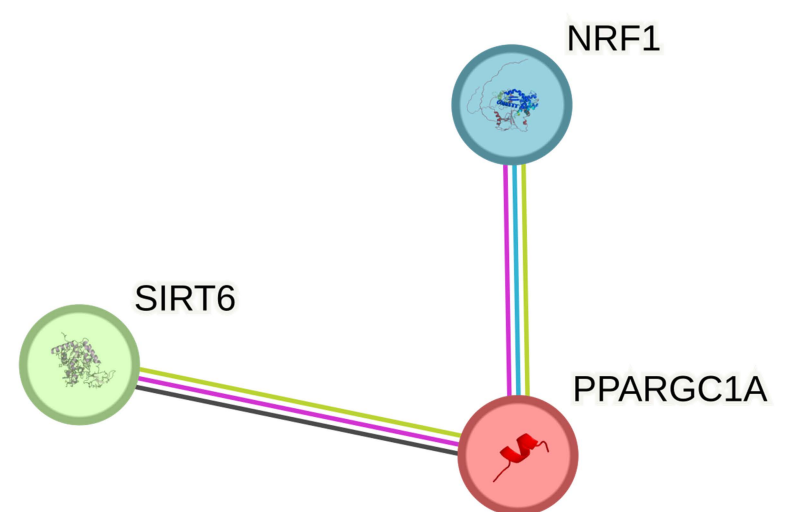
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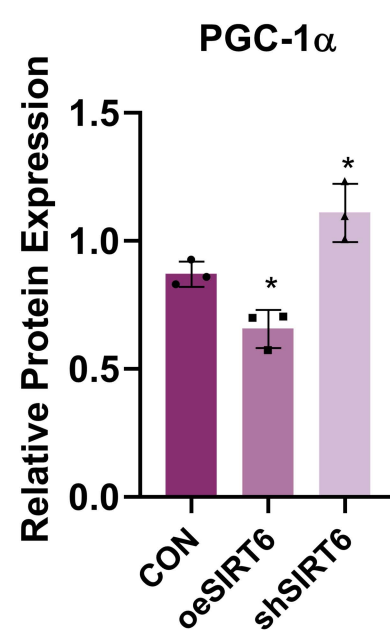
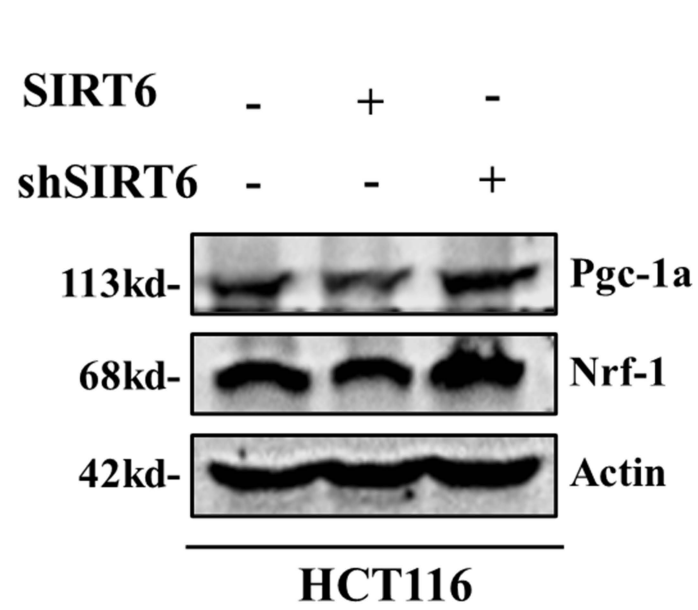
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D

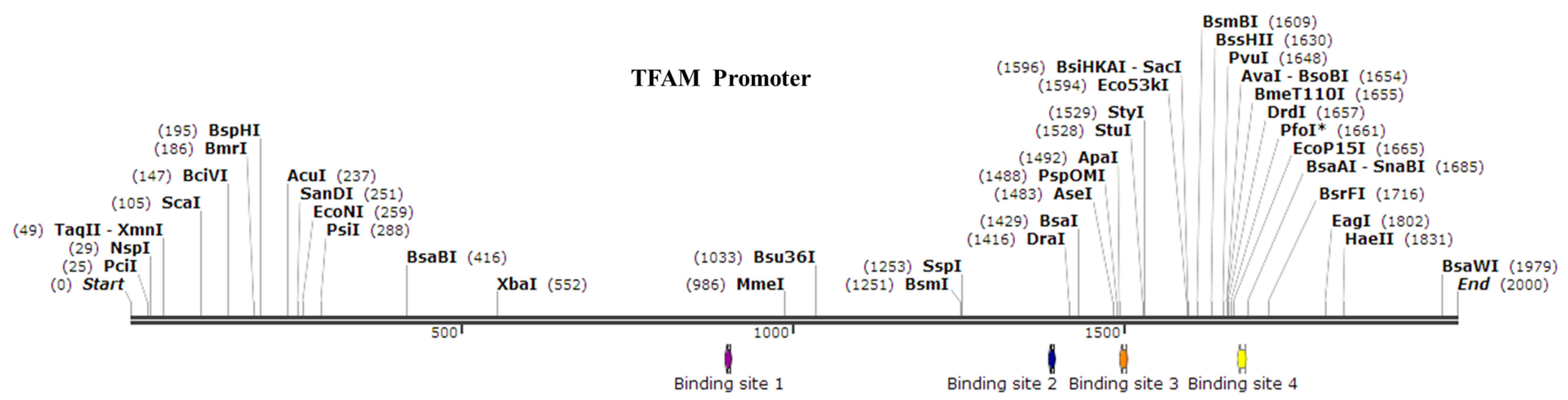


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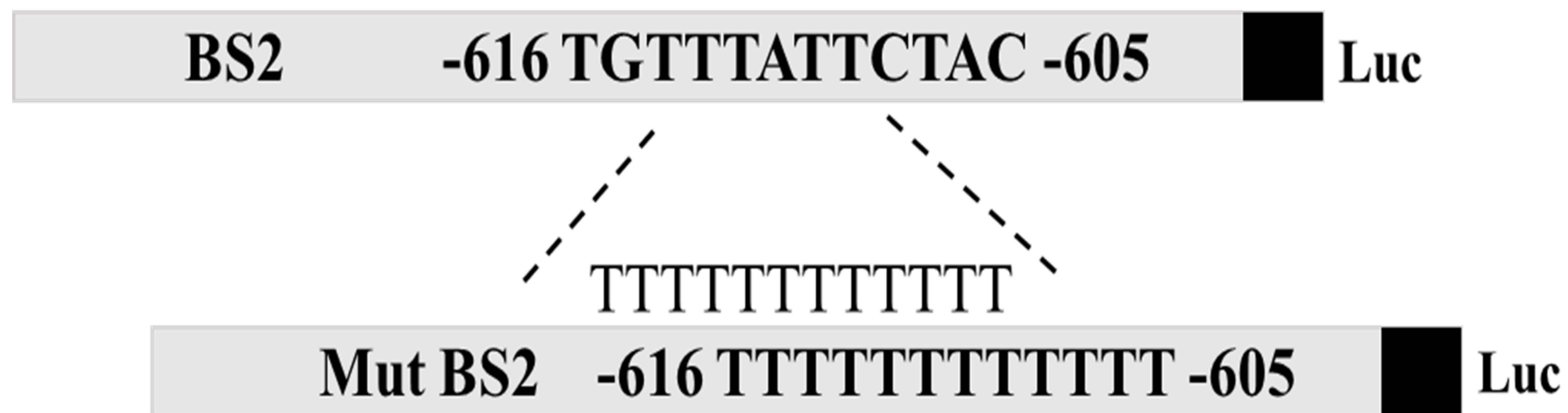


Supplemental Figure 2

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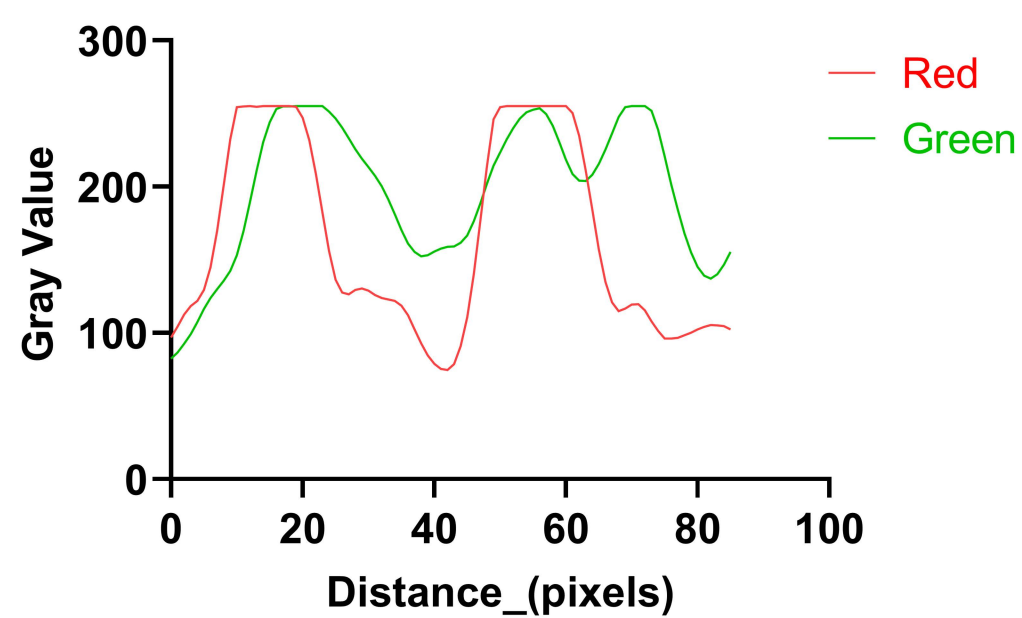


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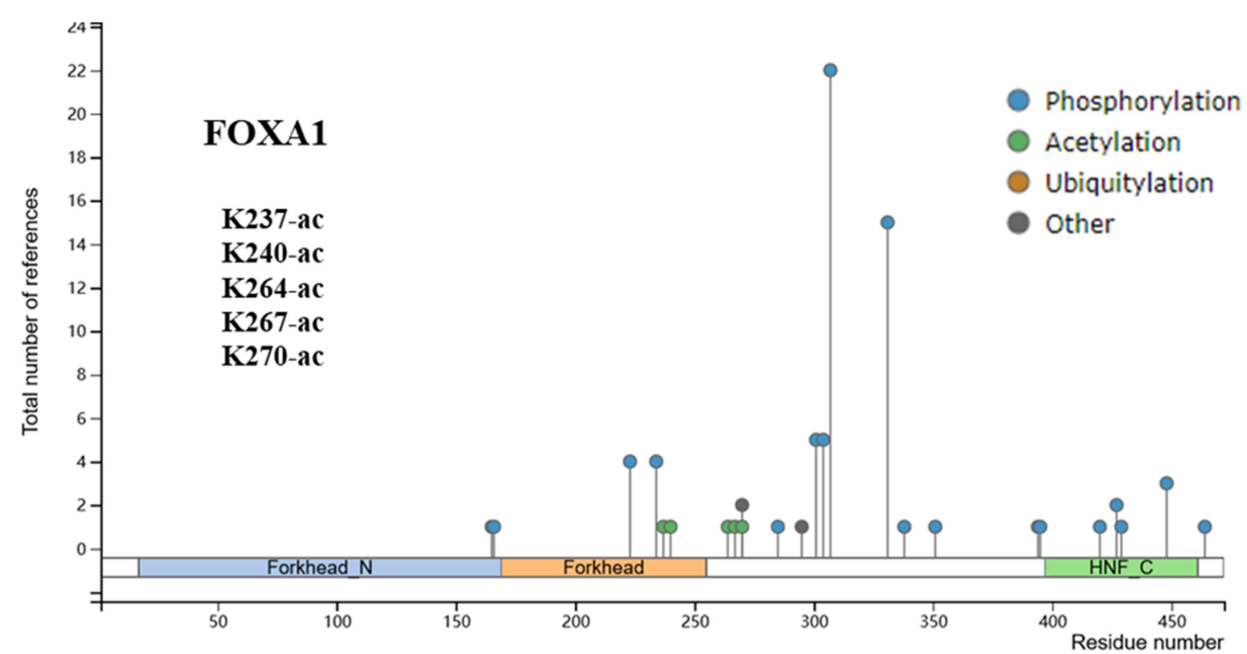


Supplemental Figure 3

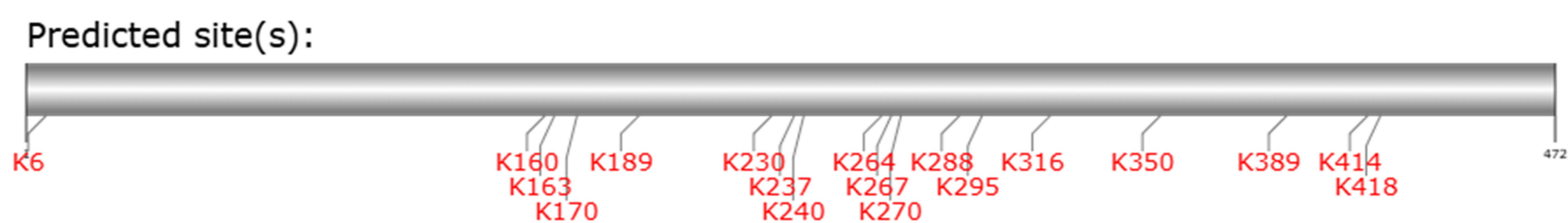
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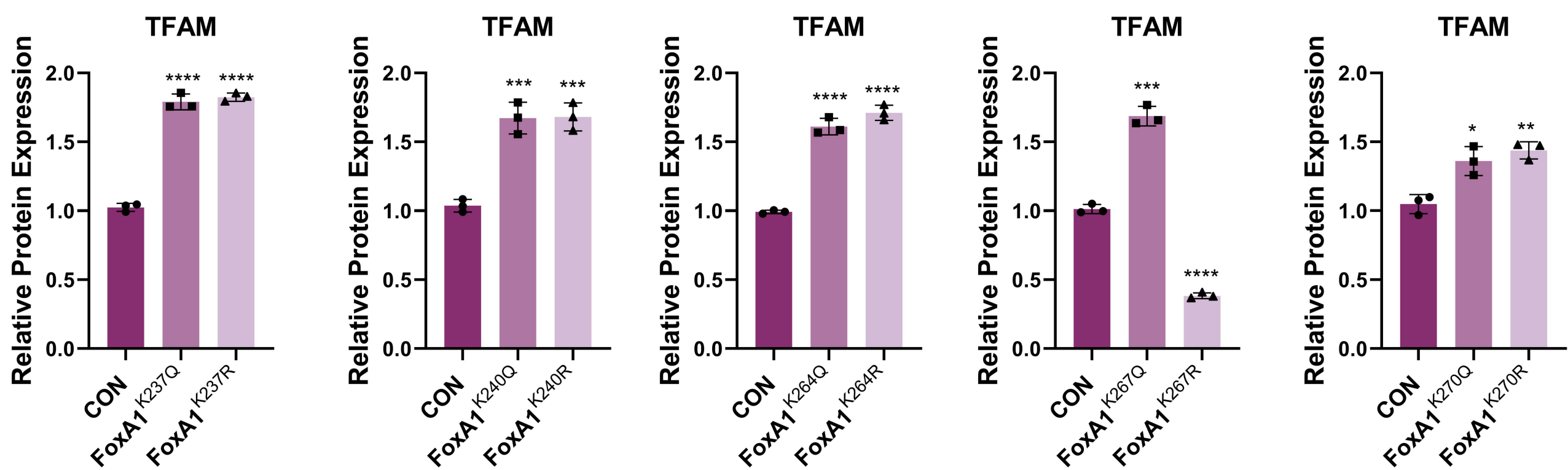
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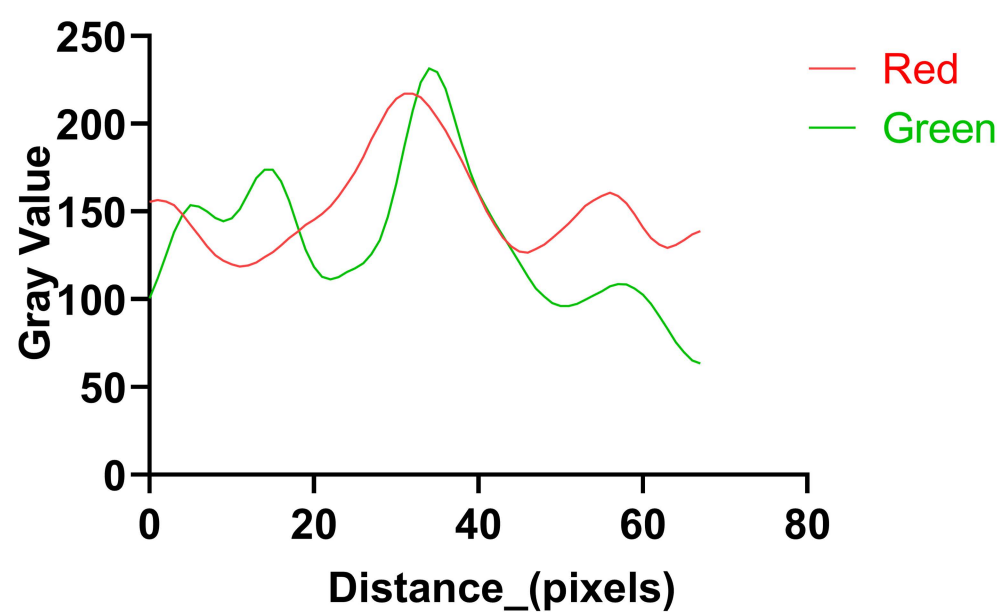
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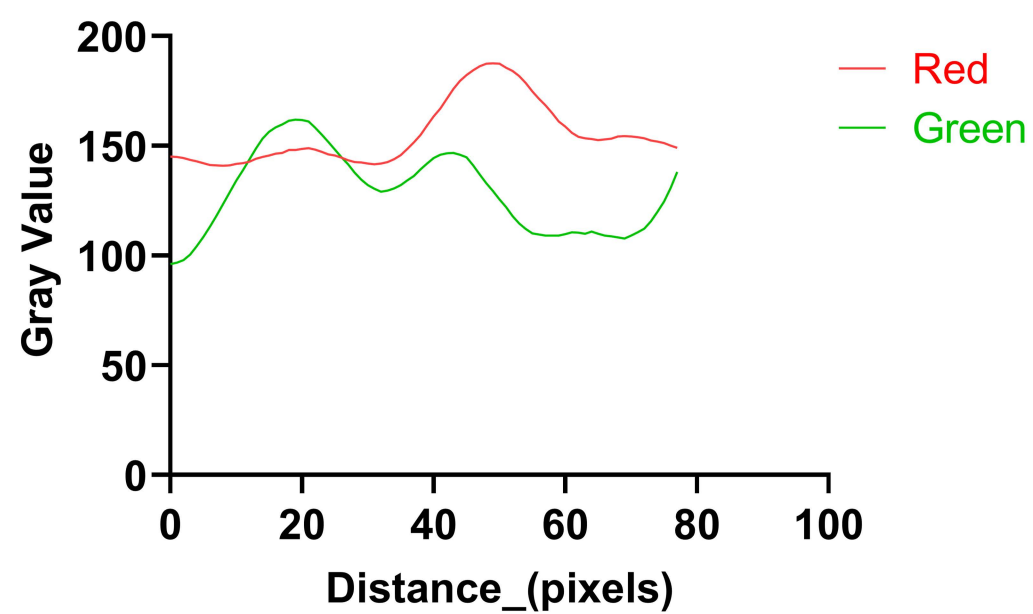
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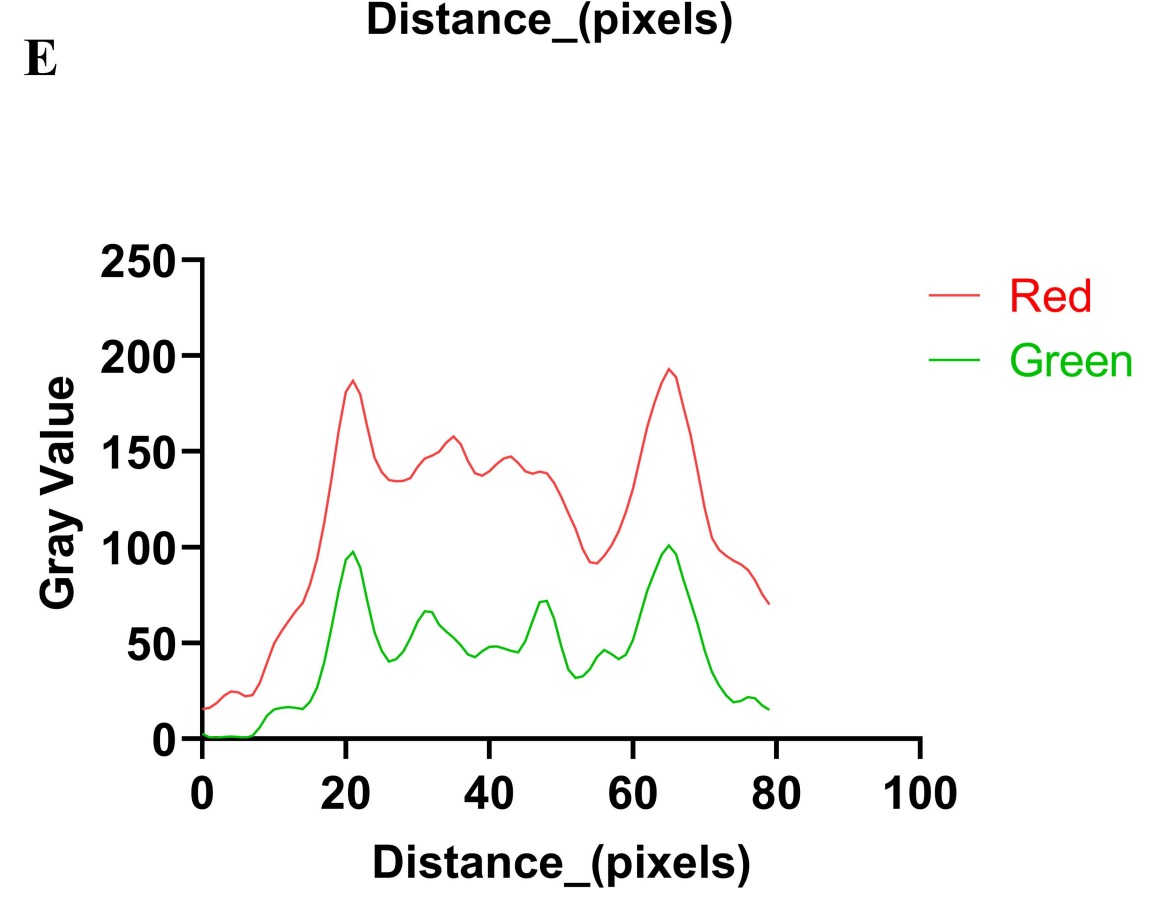
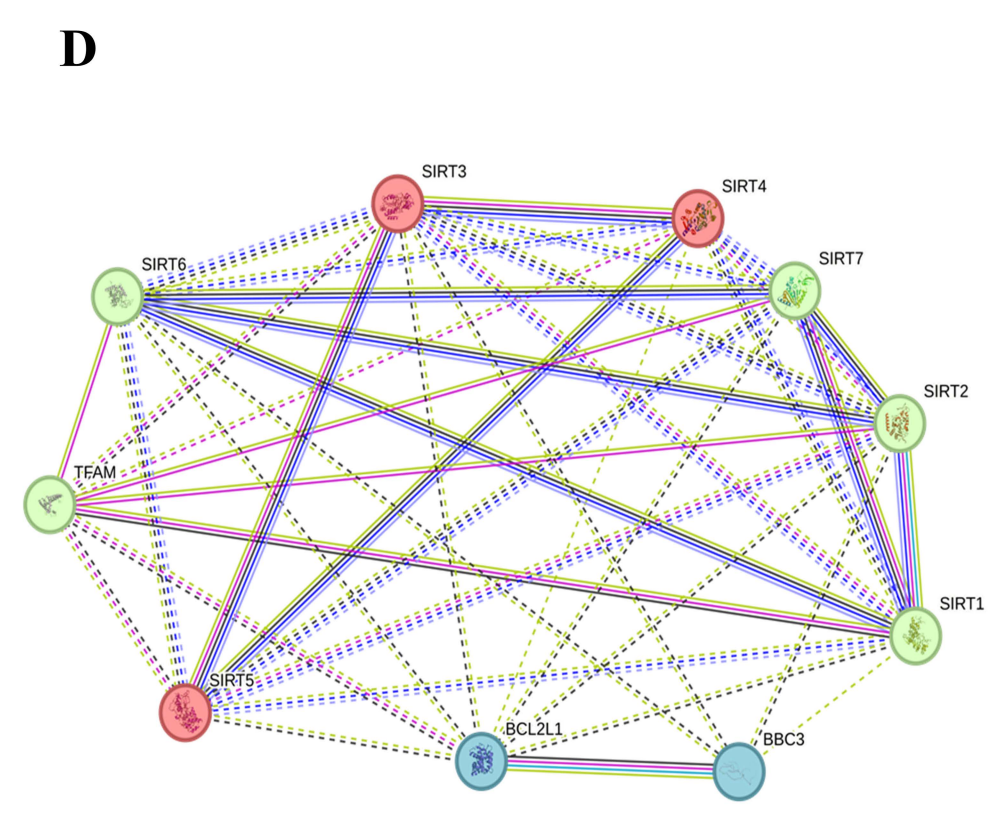
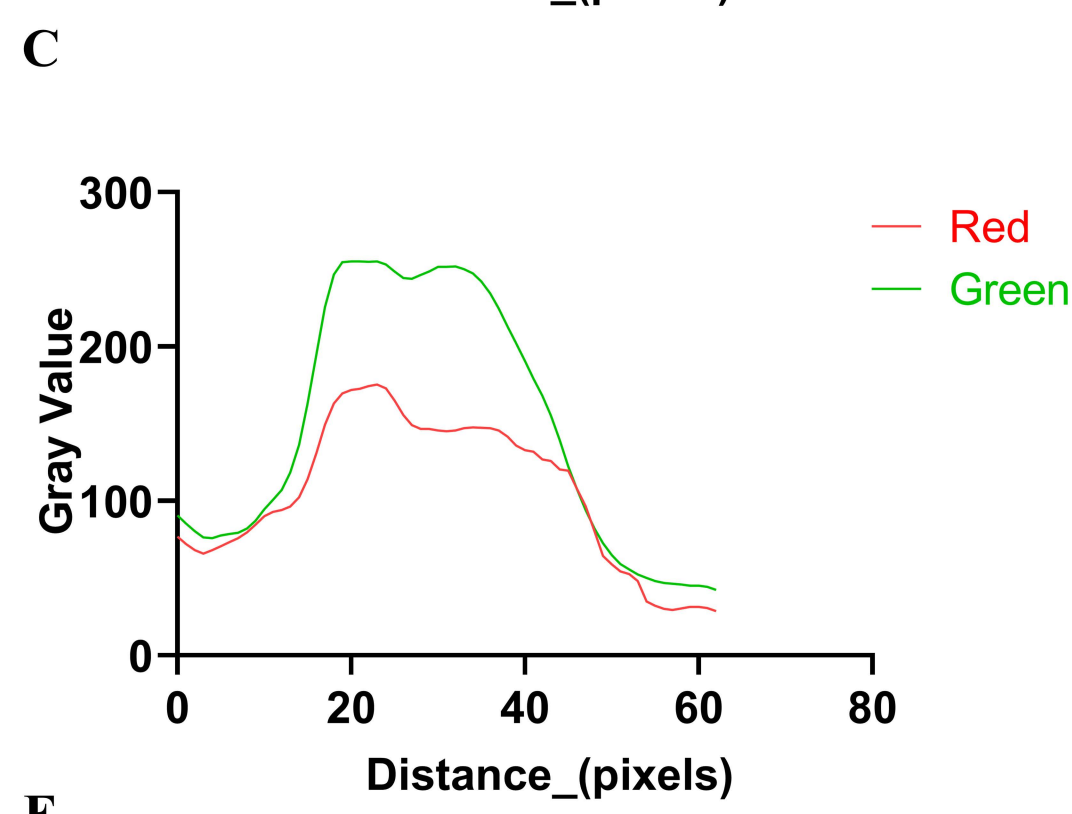
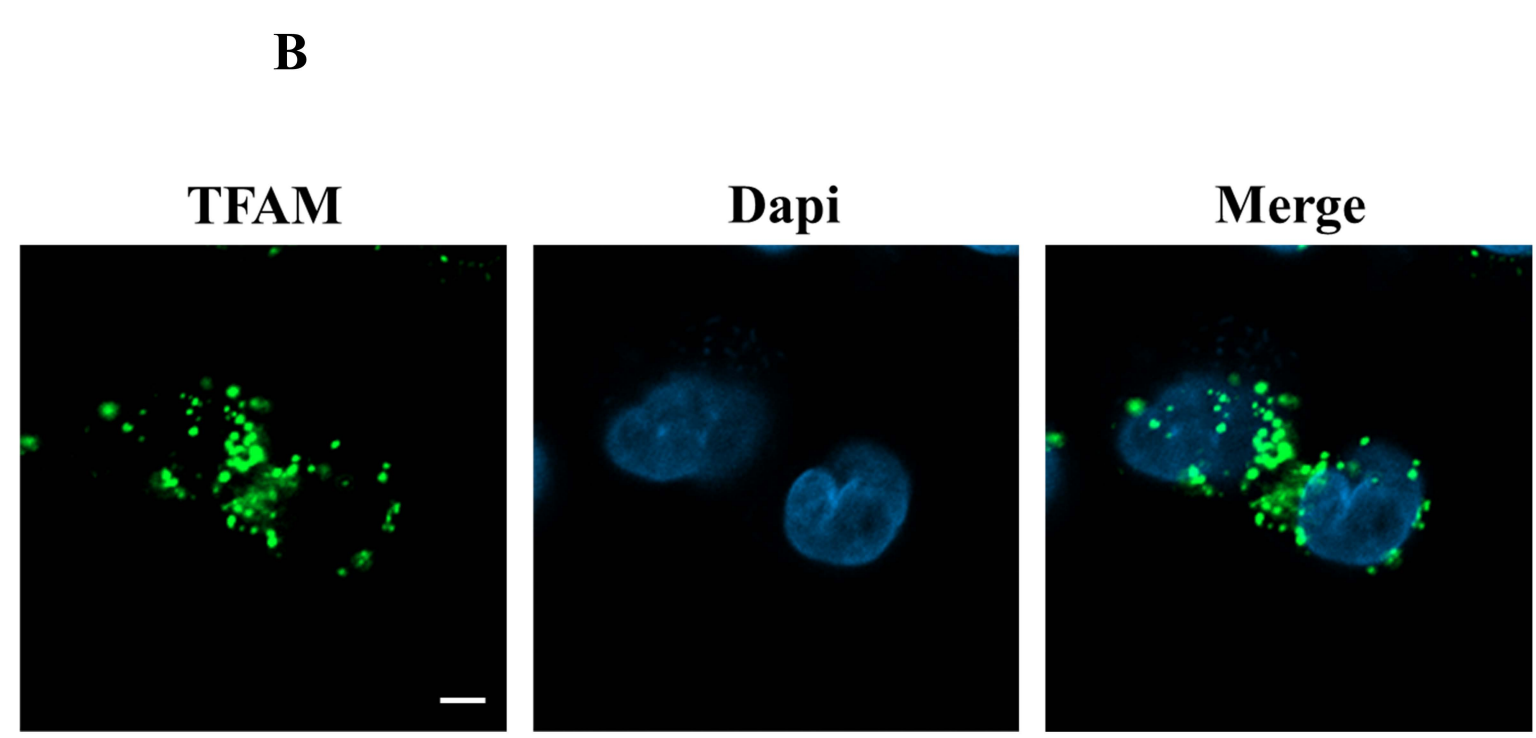
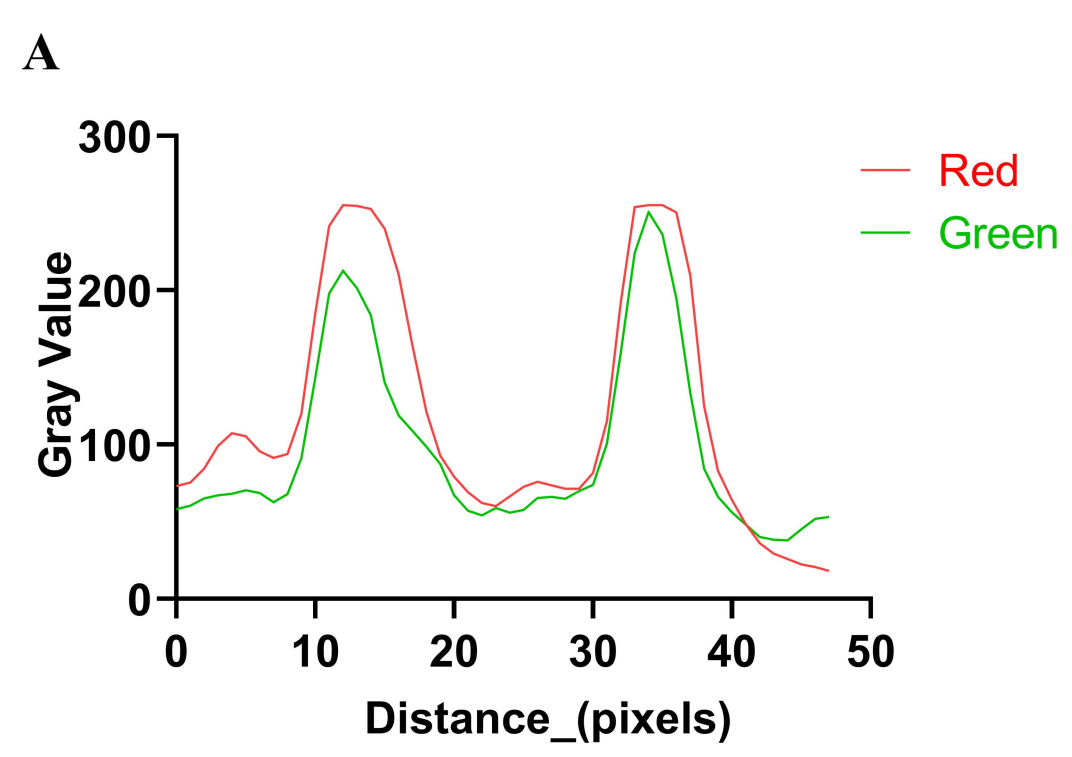
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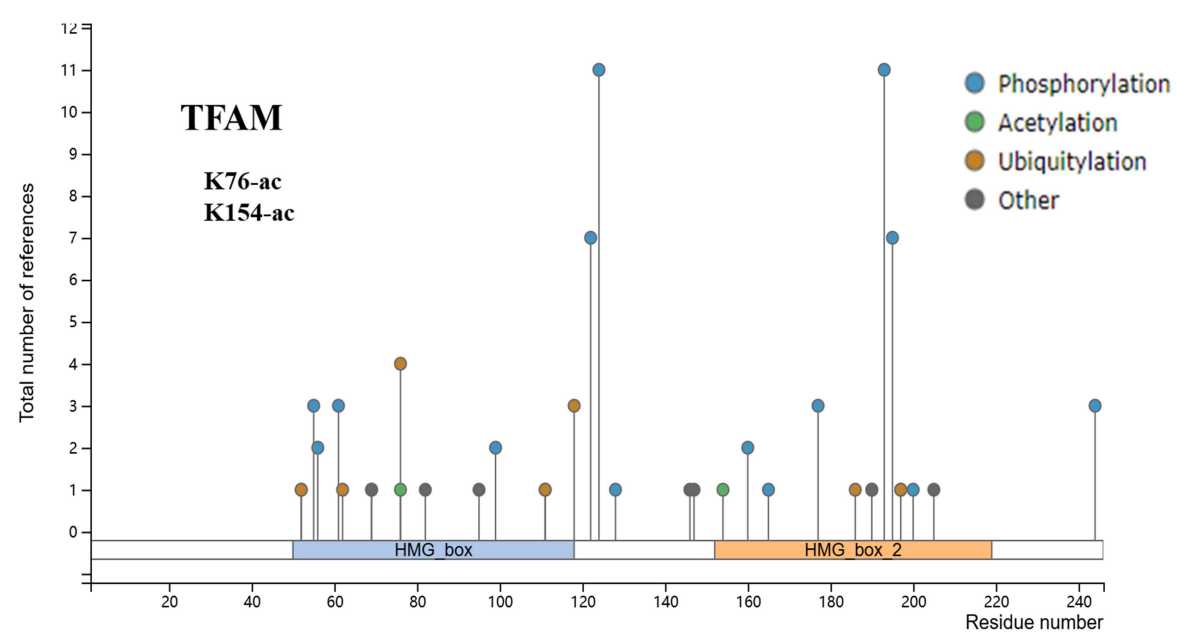


Supplemental Figure 4

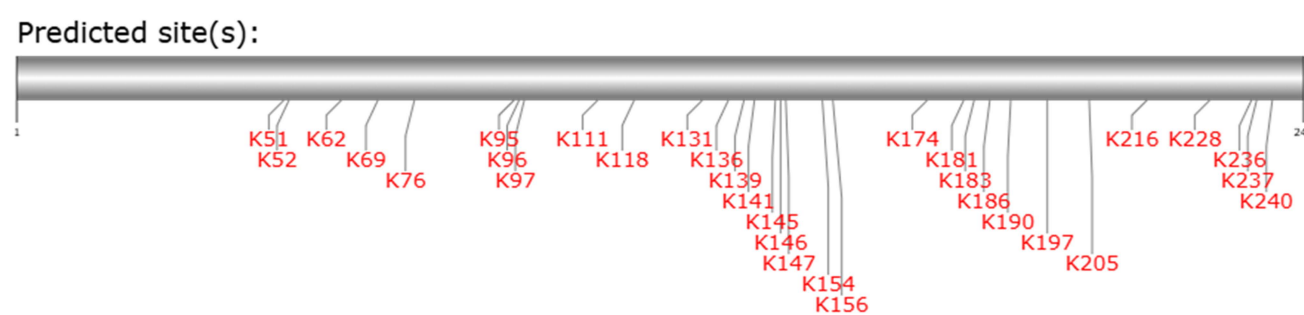


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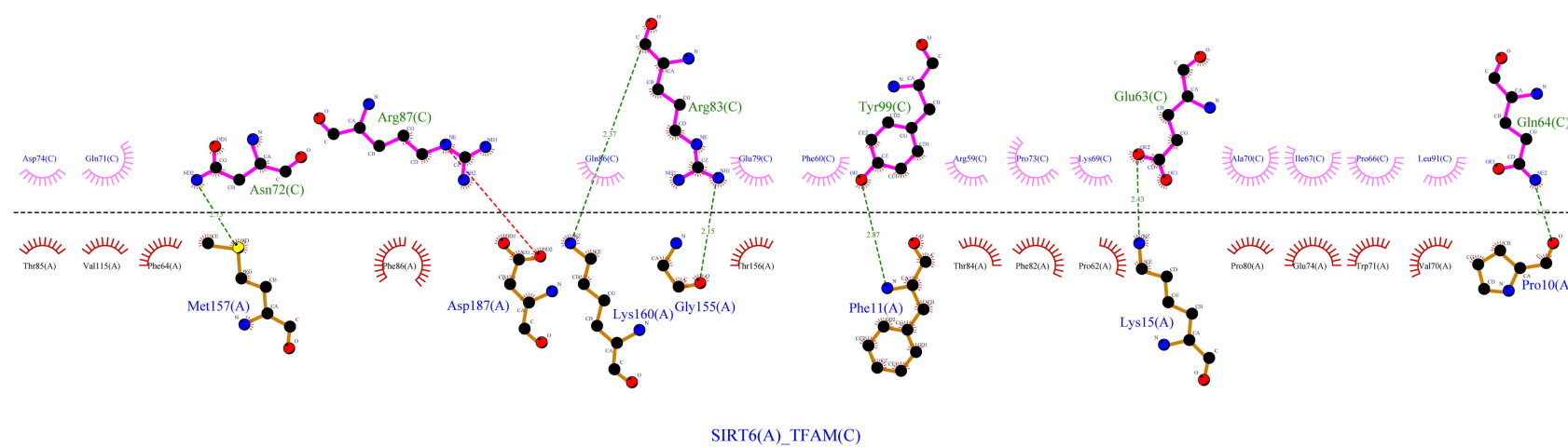
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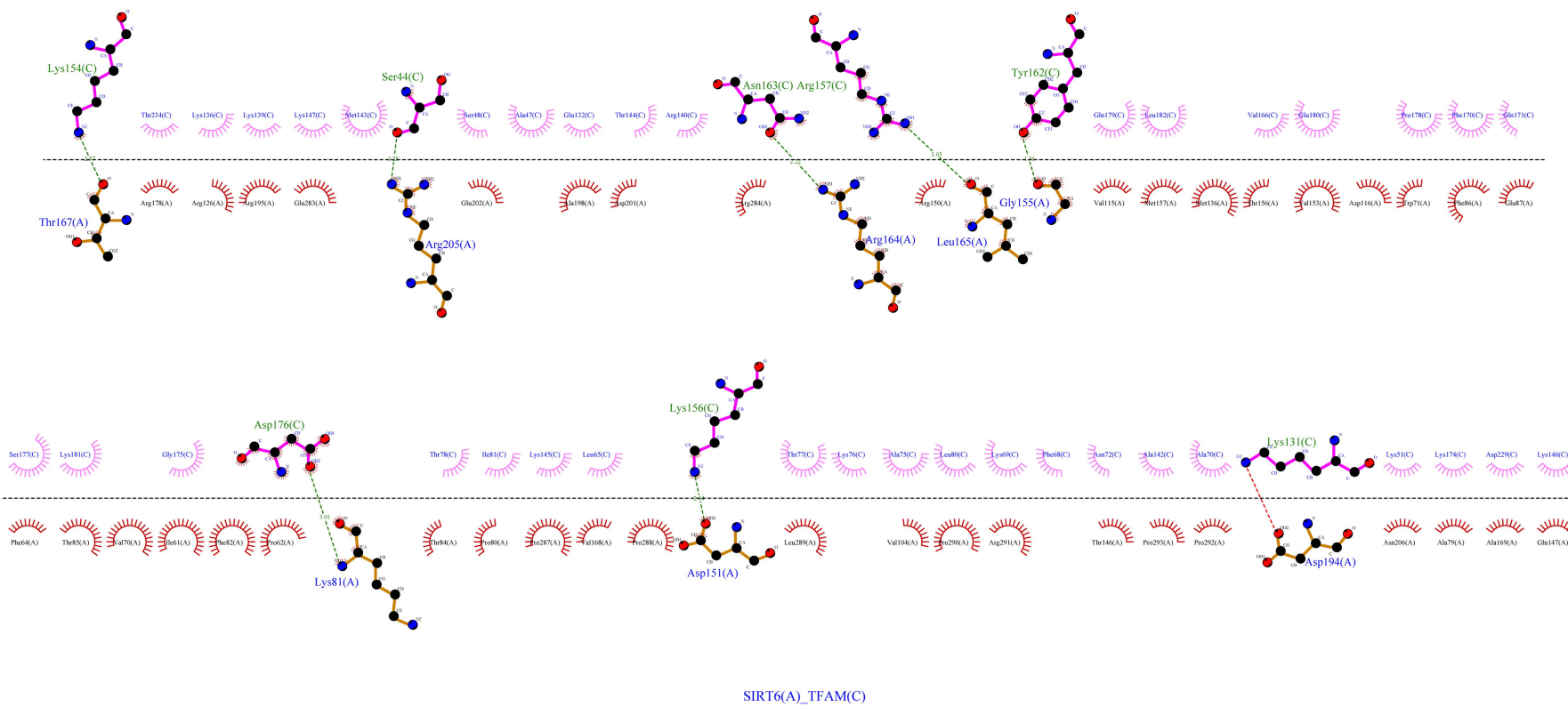
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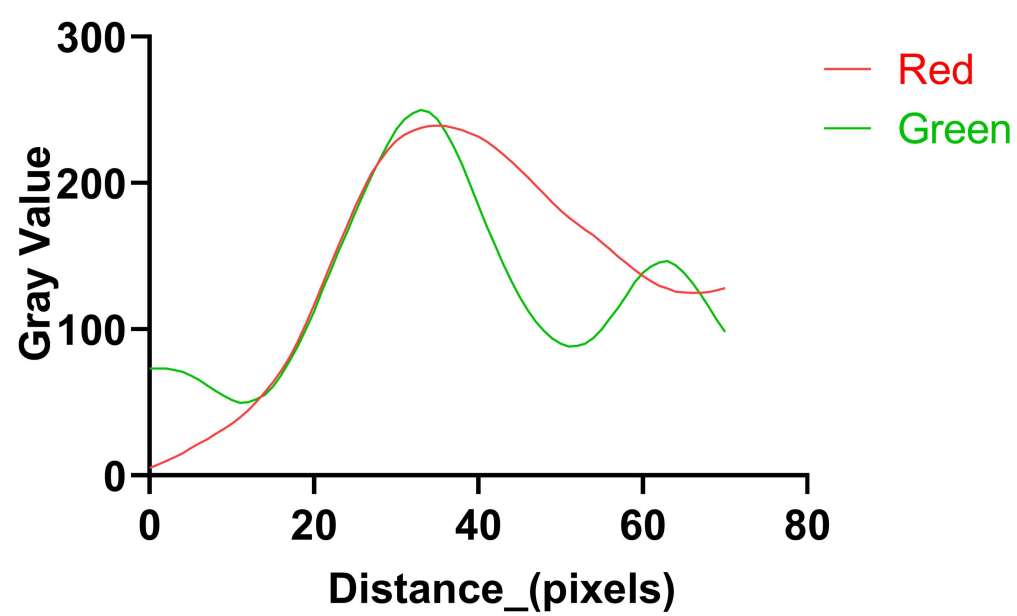
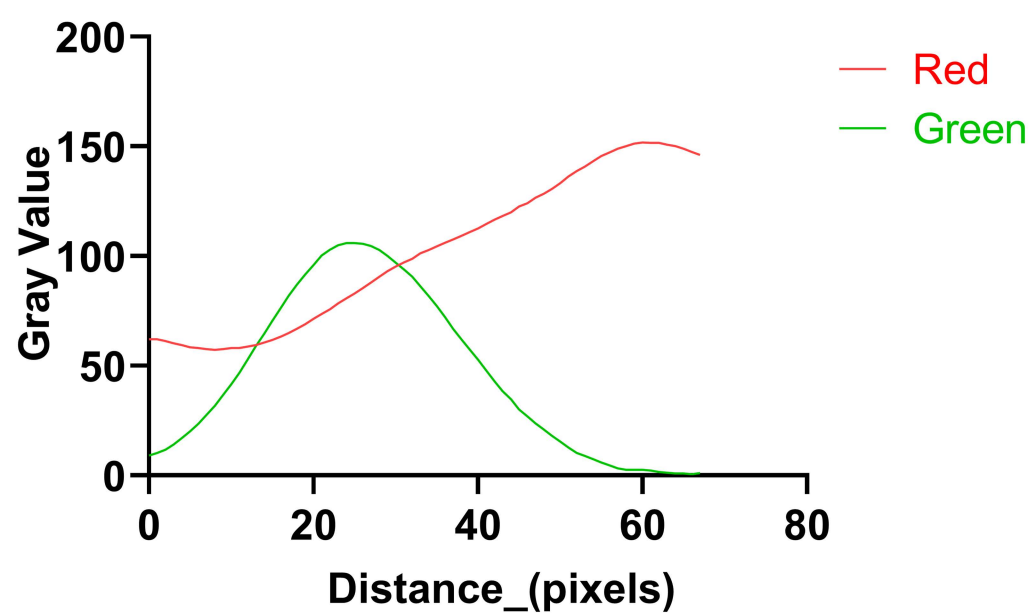
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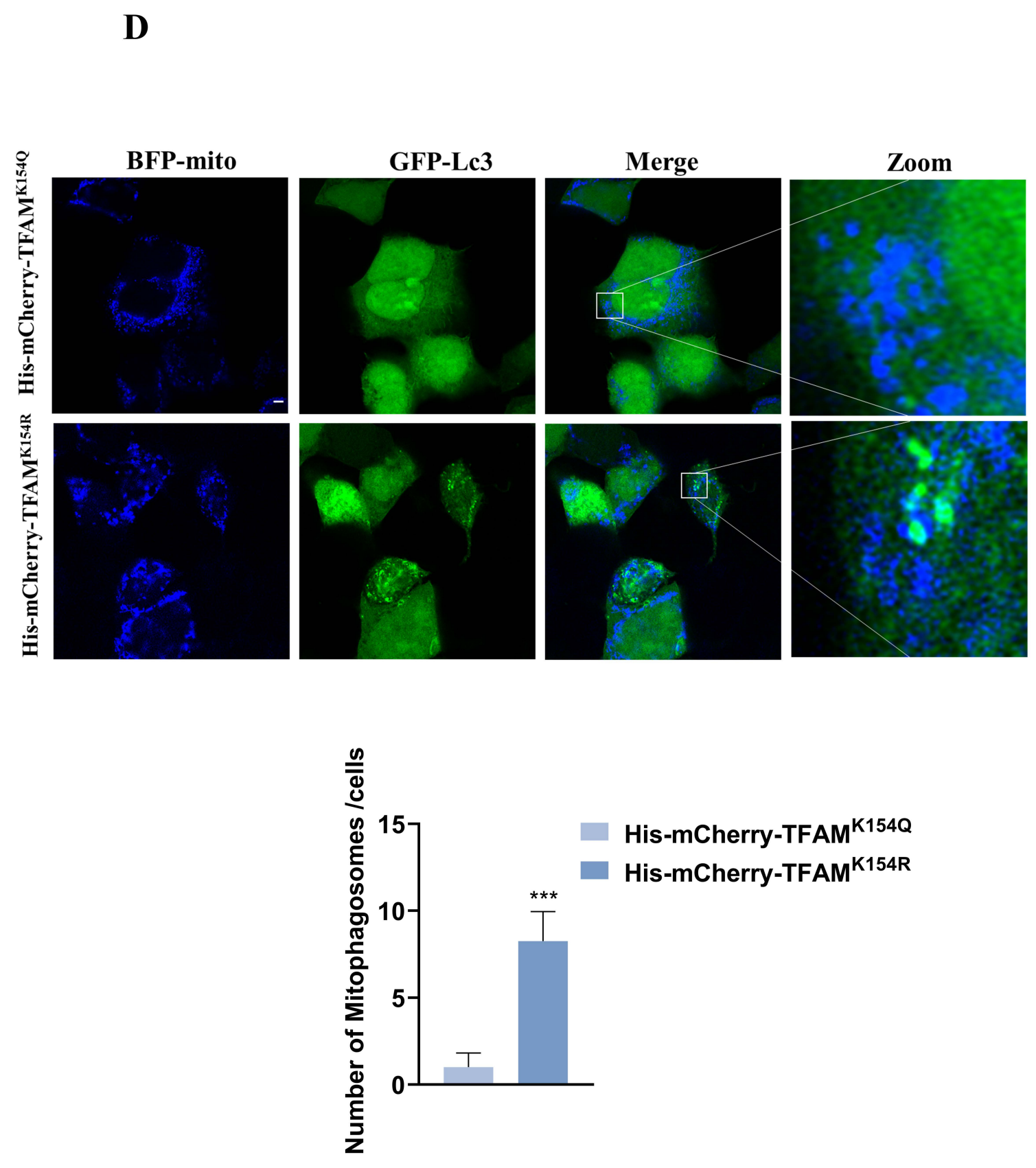
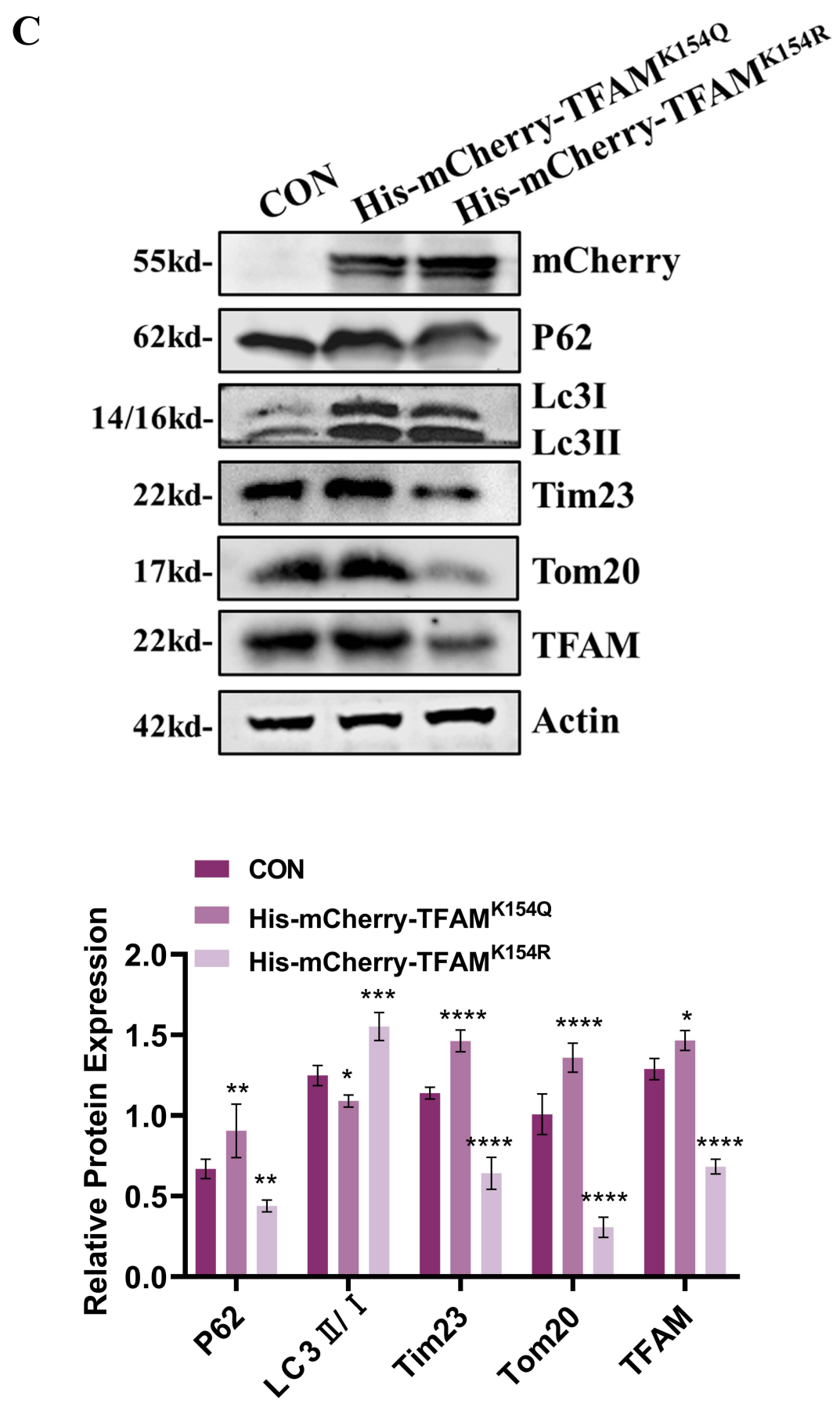
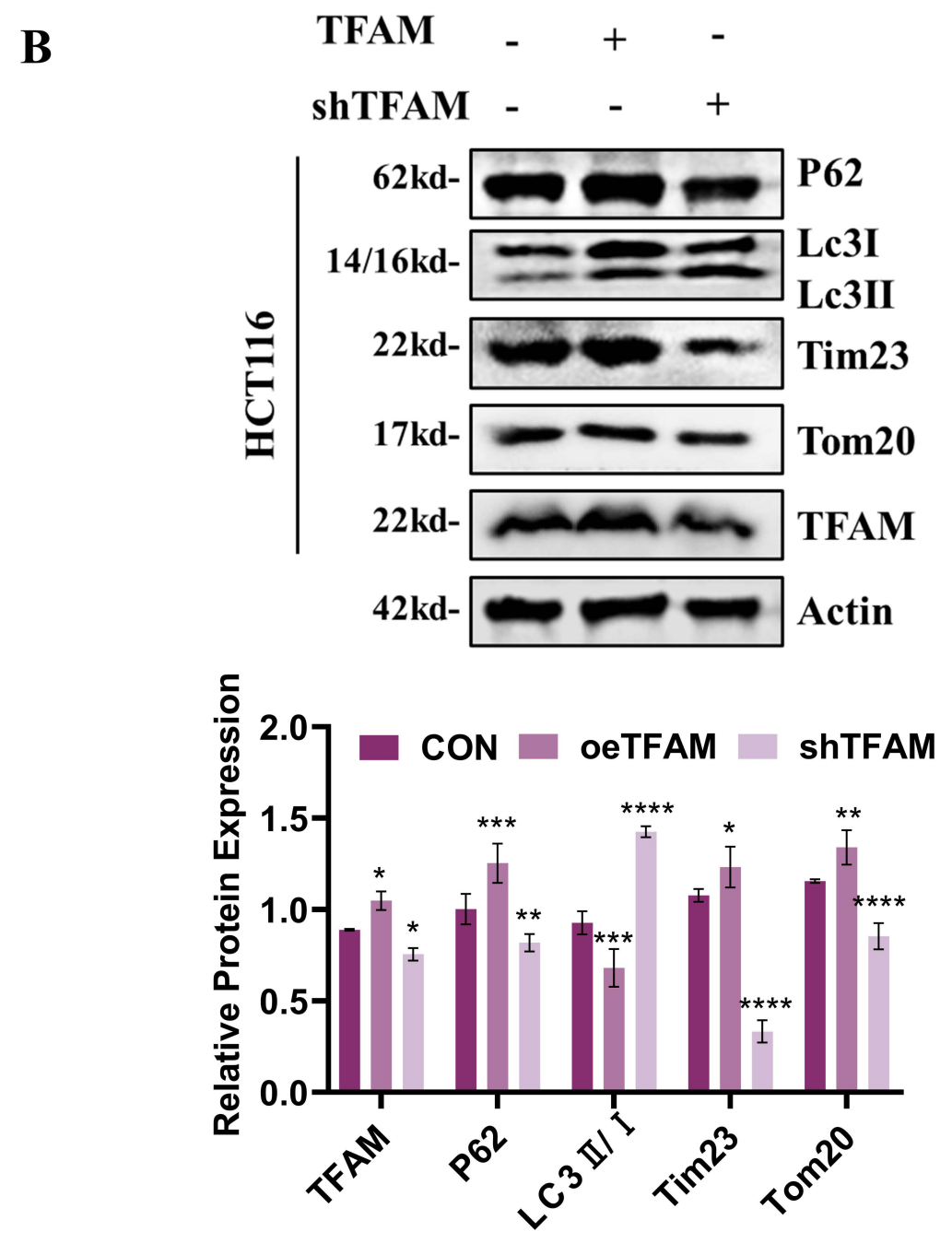
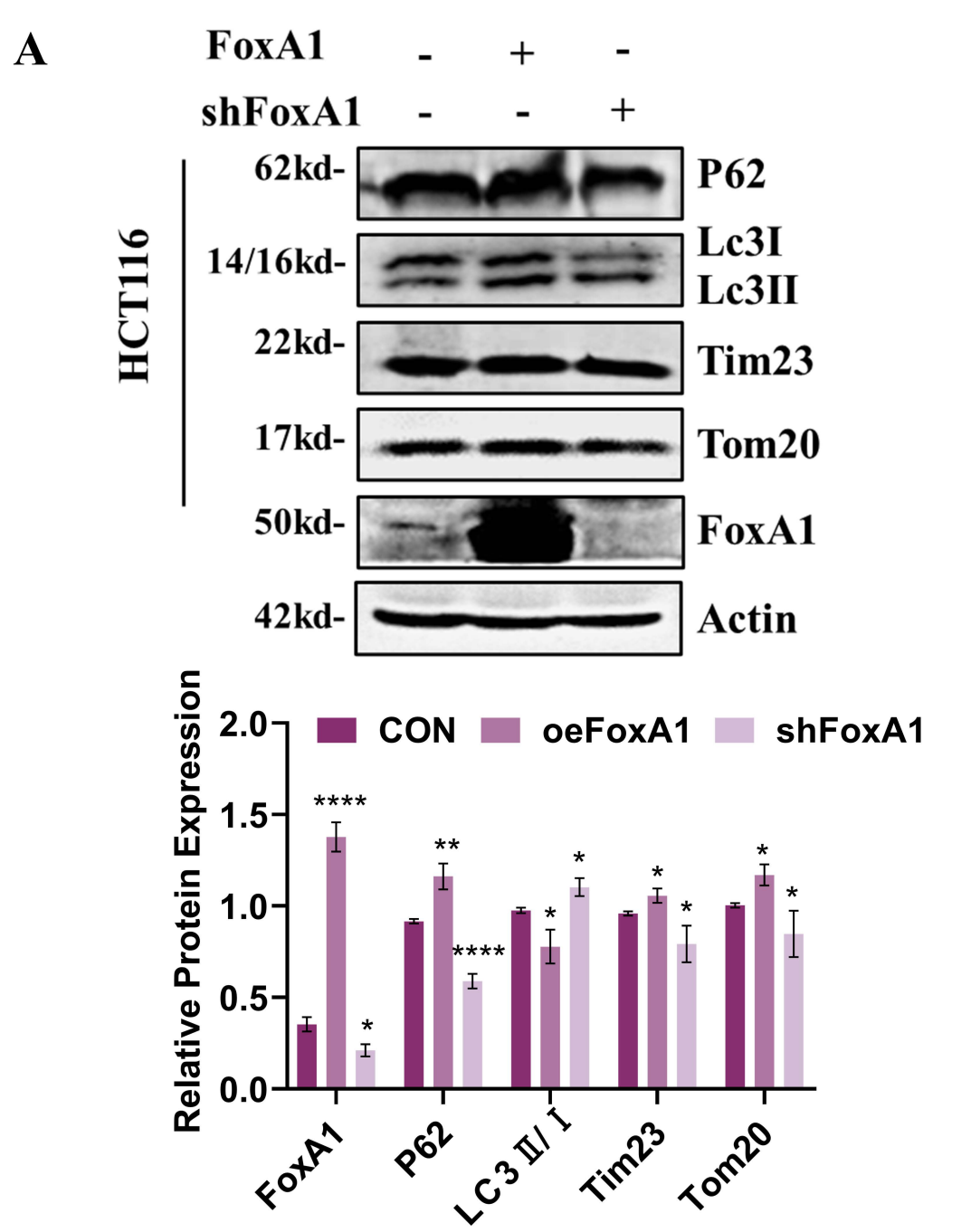
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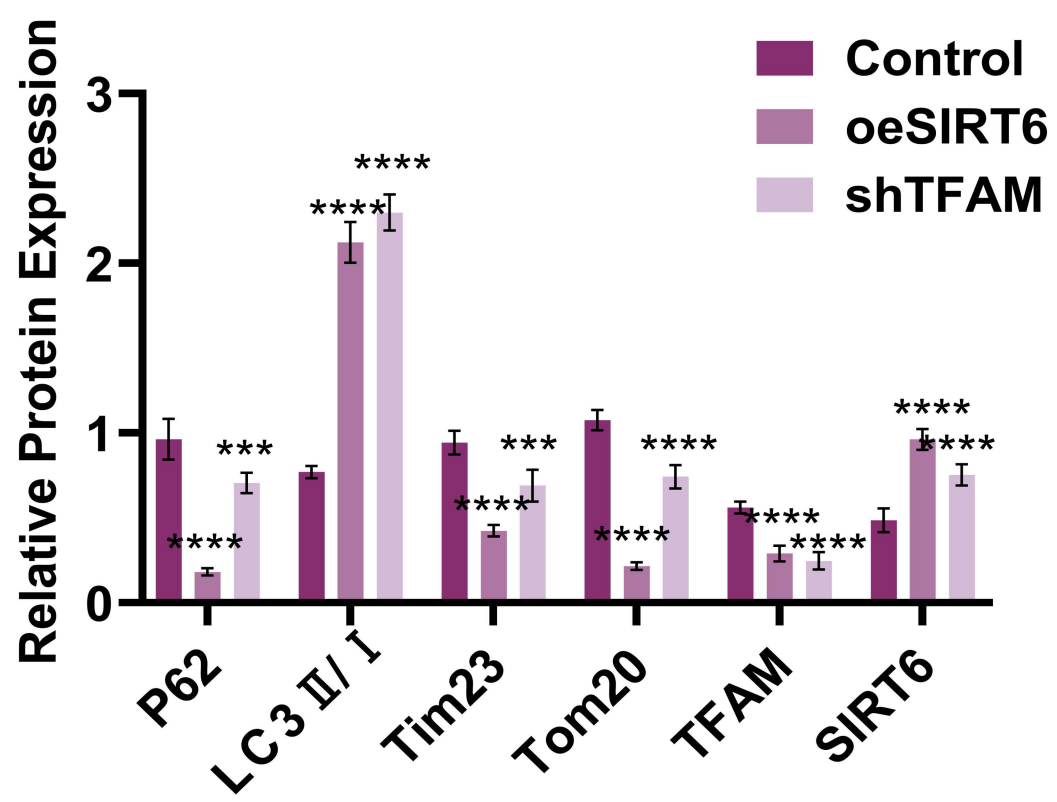
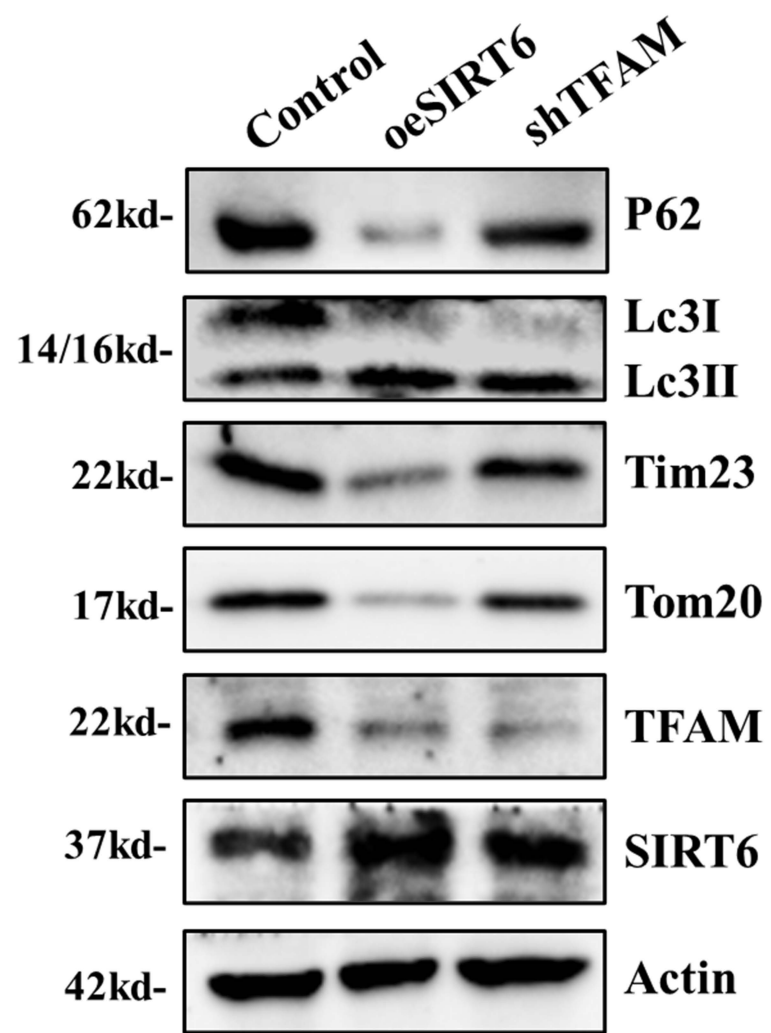
**F**

Supplemental Figure 6



Supplemental Figure 7

A



Supplementary Figure 1.

(A) Protein-protein interaction (PPI) prediction of SIRT6, FoxA1, and YY1 was performed using the *STRING* database. (B) Protein and mRNA levels of YY1 were detected in SIRT6-overexpressed or knockdown HCT116 cells. (C) RT-qPCR analysis of YY1 and SIRT6 mRNA levels. (D) PPI prediction of SIRT6, NRF1, and PGC-1 α using STRING. (E) PGC-1 α protein levels were measured. Error bars represent mean $\pm$ SEM. NS, not significant; statistical significance: * $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$ vs control group. Data are representative of three independent experiments.

Supplementary Figure 2.

(A) Potential binding sites of FoxA1 on the TFAM promoter were identified. (B) Mutation analysis of BS2 binding site.

Supplementary Figure 3.

(A) Quantitative co-localization analysis in Figure 4B using Plot Profile in ImageJ software. (B-C) Prediction of potential acetylation sites on FoxA1 by two online prediction tools. (D) Quantification of TFAM protein levels in Figure 4H. (E-F) Quantitative co-localization analysis in Figure 4L using Plot Profile in ImageJ software.

Supplementary Figure 4.

(A, C) Quantitative co-localization analysis in Figures 5A/C using Plot Profile in ImageJ software. (B) PPI prediction of SIRT family and TFAM from *STRING*. (D) Immunofluorescence staining of TFAM, followed by confocal microscopy. Scale bar = 10 μ m. (E) Quantitative co-localization analysis in Figure 5D using Plot Profile in ImageJ software.

Supplementary Figure 5.

(A-B) Prediction of potential acetylation sites on TFAM using two online prediction tools. (C-D) 2D molecular docking model of SIRT6 binding to TFAM. (E-F) Quantitative co-localization analysis from Figure 6K, using Plot Profile in ImageJ.

Supplementary Figure 6.

(A) Western blot analysis of mitophagy markers in FoxA1-overexpressed or -knocked down HCT116 cells. (B) Western blot analysis of mitophagy markers in TFAM-overexpressed or -knocked down HCT116 cells. (C) Western blot analysis of mitophagy

markers in 293T cells transfected with TFAM^{K154Q} and TFAM^{K154R}. (D) Confocal microscopy analysis of the number of cyan merged puncta after co-transfection of BFP-mito, GFP-LC3, and TFAM^{K154Q}/TFAM^{K154R} in HCT116 cells. Representative images and quantitative analysis of the number of cyan dots are shown. Scale bar = 10μm. Error bars represent mean ± SEM. NS, not significant; statistical significance: *P < 0.05, **P < 0.01, ***P < 0.001 vs. control group. Data are representative of three independent experiments.

Supplementary Figure 7.

(A) Western blot analysis of mitophagy marker proteins in tumor tissues from xenograft mouse models. Error bars represent mean ± SEM. NS, not significant; statistical significance: *P < 0.05, **P < 0.01, ***P < 0.001 vs. control group. Data are representative of three independent experiments.

Supplementary Table 1

	A	B	C	D	E	F	G	H	I	J
1	Only SIRT6-Cc	Only MitoCar	Only MitoPro	SIRT6-Cor-Ge	SIRT6-Cor-Ge	MitoCarta AN	SIRT6-Cor-Gene	AND MitoCarta	AND MitoPro	Proteome
2	PNRC1	ATP5F1A	1-Mar	GTPBP6	EEFSEC	SDHB	AASS			
3	SERINC1	ATP5F1E	2-Mar	MICOS13	DNAJC5	COQ7	ABCB8			
4	RO60	ATP5F1B	5-Mar	METTL4	PTPN11	SDHA	ABHD11			
5	S100A6	SDHAF4	4-Sep	C2orf69	GMPPB	COQ5	ACAD9			
6	EHD1	ATP5PO	ABCA12	ACAA1	BCAT1	PDHA1	ACADS			
7	ADGRL2	ATP5ME	ABCA8	GUK1	CLN3	COX5A	ACADVL			
8	GCA	ATP5PF	ABCF2	VPS13D	TMEM160	ISCA2	ACO2			
9	RNASEH2A	GATD3A	ABCG1	FDX2	NELFE	PMPCB	ACOT7			
10	FAM171B	MICOS10	ABCG2	TIMM29	CTSA	UQCRCF51	ADCK1			
11	FOXN3	ATP5F1C	ABHD6	RAB5IF	SPNS1	PDHB	ADCK2			
12	FBL	COQ8A	ABL1	DMAC2	KRAS	UQCRC2	ADCK5			
13	SENP1	ATP5PB	ACN9	ETFRF1	PPP1CC	SDHD	AIFM2			
14	FAM89B	MT-ATP6	ACO1	C8orf82	ERCC6L2	MRPS35	AIFM3			
15	HBS1L	MT-CO2	ACOX1	METTL15	UBA1	MRPL53	AKAP10			
16	FZR1	FAHD2A	ACOX3	MIGA1	ATG12	PKD4	ALKBH7			
17	STUB1	MTARC2	ACSBG2	C16orf91	LRP5	MRPS27	APOOL			
18	IFNAR1	SQOR	ACSL5	RCC1L	MAPK3	CS	ARL2			
19	RNASE2	ATP5PD	ACSM6	RPUSD3	SRC	GRPEL1	ATAD1			
20	ESPN	ATP5MG	ACYP2	MARCHF5	ACBD3	DLAT	ATAD3A			
21	PLEKHG5	MOCS1	ADAP2	GRHPR	MAN2A1	LRPPRC	ATAD3B			
22	TANK	MMUT	ADCK3	AFG1L	PSMB3	DLST	AURKAIP1			
23	TP53I13	ATP5MC3	ADCK4	NDUFAF8	CYP1B1	PDHX	BAD			
24	ATXN7L3	NIPSNAP2	ADH5	METTL8	ATG9A	MPC2	BAX			
25	FPGT	RIDA	ADO	RECQL4	ATXN3	NDUFS1	BBC3			
26	STX7	MRPL58	ADPRHL2	NAXE	GSK3B	MRPL46	BCAT2			
27	GSDMD	MRM3	AGAP2	ATP5MC1	DIAPH2	SLC25A3	BCKDK			
28	NIBAN2	FMC1	AGR2	ATP5MC2	PFDN2	MRPS23	BCS1L			
29	GPR63	SDHAF3	AKAP8	MYG1	UACA	FH	BDH1			
30	DENND1B	PRELID3B	AKT1	ANTKMT	ZNF205	SUCLA2	BLOC1S1			
31	ARTN	ECHDC1	ALB	FABP1	ELK3	COQ3	BNIP3L			
32	PIGA	MTRES1	ALDOC	UQCC3	PPP2R3C	IARS2	C6orf136			
33	ZMYND19	KYAT3	ALKBH3	NSUN3	GSTP1	MRPS15	CA5B			
34	SLAIN2	MAIP1	ALOX12	PNPLA8	USP48	IDH3A	CASP8			
35	ARHGEF12	HAO2	AMBRA1	ANGEL2	MAP1S	COX11	CBR4			
36	PKN2	ATP5MPL	ANXA1	TRMT1	ZMIZ2	ETFDH	CHCHD10			
37	PRPF6	COX19	ANXA10	ATP5F1D	ZDHHC8	BCKDHA	CHCHD2			
38	NKIRAS1	HDHD5	AP2M1	ATP5IF1	INF2	UQCRH	CHCHD5			
39	CHTF18	COA8	APOA1BP	PREPL	STK11	LETMD1	CHCHD6			
40	GSS	ATP23	APOPT1	SPHK2	TTC3	COX15	CISD3			
41	SUPT5H	ATP5MF	ARGLU1	SELENOO	HIVEP1	AFG3L2	CLPP			
42	CWF19L2	NGRN	ARL2BP	TMEM205	ATG2A	HADHA	CLPX			
43	TMEM161A	MT-CO1	ARL6IP5	MIGA2	AIP	ETFA	COA1			
44	RC3H2	MTFR1L	ARMS2	ARF5	RPS6KB1	CPT2	COA3			
45	GYS1	SDR39U1	ARRB2	SLC30A9	CTU2	BCKDHB	COASY			
46	ITPR1PL2	PRELID3A	AS3MT	MCRIP2	IREB2	IDH3B	COMT			
47	GNB2	TOMM70	ASAH2	PRORP	ATG4C	LARS2	COMTD1			
48	GINM1	MT-ND2	ASB9	SMIM8	AGPS	LETM1	COQ4			
49	VCPKMT	MT-ND4	ASS1	PRDX2	NAIF1	AUH	COQ9			
50	B3GAT3	MT-ND5	ATCAY	DCXR	CAV2	SUCLG1	COX14			
51	SON	DELE1	ATG3	PUSL1	CTU1	NDUFV2	COX4I1			
52	PDE4D	STOM	ATG4A		MEF2A	COQ6	COX5B			
53	ZBTB25	METTL5	ATG5		PPP3CA	NDUFB8	COX6A1			
54	THAP9	DGLUCY	ATG7		PYCARD	DLD	COX6B1			
55	TMPO	MT-CYB	ATIC		TIMM23B	AIFM1	COX8A			
56	FLOT1	AKR1B10	ATP2A1		AGTPBP1	ECHDC3	CRY1			
57	GMEB2	PXMP4	ATP5A1		FAM32A	MRRF	CYB5R3			
58	UBALD1	CHPT1	ATP5B		ATF2	ACADM	CYC1			
59	RAD17	MT-ATP8	ATP5C1		CASP8AP2	IMMT	D2HGDH			
60	ANAPC2	HTATIP2	ATP5D		DDAH2	TIMM9	DBT			
61	SP1	AKR7A2	ATP5E		GPRC5C	SLC25A4	DHRS1			
62	TUBA4A	MT-CO3	ATP5EP2		VRK2	SAMM50	DHX30			
63	WDR83OS	DHRS7B	ATP5F1		PPP2R1A	SUPV3L1	DNA2			
64	REL	MTHF5	ATP5G1		DHX29	FECH	DNAJA3			
65	YIPF3	PNPO	ATP5G2		CLIC4	MTIF2	DNAJC4			
66	TP53BP1	PRDX6	ATP5G3		ATG4D	HIBCH	DNM1L			
67	PRICKLE3	GARS1	ATP5H		NUDT1	HSPA9	ECH1			
68	ZCCHC7	LYRM9	ATP5I		ATG4B	SURF1	ECHS1			

	A	B	C	D	E	F	G	H	I	J
69	PPP2R3A	NAXD	ATP5J		SFN	PRDX3	ECI1			
70	NFXL1	MT-ND3	ATP5J2		MAP3K1	GHITM	ECSIT			
71	ZDHHC12	ACCS	ATP5L		CSDE1	GUF1	ENDOG			
72	ZNF521	LYPLAL1	ATP5L2		MAP1LC3A	LYRM4	ERAL1			
73	TRAF2	DNAJC28	ATP5O		ARAF	MRPL16	ETFB			
74	KRIT1	NRDC	ATP5S		SH3GLB1	MRPL40	ETHE1			
75	KITLG	FAM210B	ATP5SL		DDX3X	SDHC	EXOG			
76	WDFY3	AHCYL1	ATP6		PEMT	NDUFB5	FASN			
77	PDZD3	NIPSNAP3A	ATP6V1E1		ABCE1	COQ10A	FASTK			
78	UBA52	MTARC1	ATP7B		TCIRG1	COX6C	FASTKD2			
79	SLC39A4	CBR3	ATP8		TRAF6	NDUFB9	FBXL4			
80	ZC3H11A	KARS1	ATPIF1		MPG	MTCH2	FIS1			
81	LARP1B	TMEM177	AVP		MAP2K2	NDUFA6	FKBP8			
82	LNPB	TOP3A	AZIN2		PALLD	SLC25A20	FLAD1			
83	H4C3	LDHAL6B	BAG1		SLC30A6	MRPL1	FPGS			
84	TERF1	MCUB	BAG5		CHPF	COX17	FTH1			
85	TULP4	TWNK	BBOX1		PLN	VDAC1	GADD45GIP1			
86	DGCR6L	PYCR2	BDH2		GDF2C	HADH	GCDH			
87	GRINA	TSTD1	BDNF		EMC8	ACADL	GFER			
88	FKBP7	OSBPL1A	BECN1		DHX57	ACAT1	GFM1			
89	KIAA1143	COQ8B	BFSP1		RNF144B	MALSU1	GLS			
90	CFL2	TSTD3	BHLHA15		TUSC2	NDUFS4	GLYCTK			
91	RBAK	EPHX2	BLID		RAB1B	C1QBP	GPAM			
92	CPTP	NUDT5	BLOC1S2		LMNA	PITRM1	GPD2			
93	ZBTB17	BOLA3	BMF		NR3C1	UQCC1	GPX1			
94	GNB1L	PLPBP	BNIP1		TMTC1	MRM1	GPX4			
95	MIA3	HINT1	BOP		MYH14	MECR	GRPEL2			
96	NRAS	MRM2	BRD8		ATP7A	MRPL44	GTPBP10			
97	HS2ST1	MGST3	BRI3BP		ATP6V1A	HSDL2	GTPBP3			
98	SYNCRIP	SMIM20	BRINP3		POP7	MRPS14	HAGH			
99	XAB2	MT-ND1	BTD		DNAJC27	ATPAF2	HDHD3			
100	RAB17	ACOT11	BZRAP1		CYBB	NDUFA9	HIGD2A			
101	YIPF6	NIPSNAP3B	C10orf10		BCAP31	COA6	HINT3			
102	PUM1	ACOD1	C12orf10		AKT3	ISCU	HSD17B10			
103	RPGR	DMAC2L	C14orf119		ACSL3	RTN4IP1	HTRA2			
104	MAP3K13	PRXL2A	C14orf159		RIPK3	OGDHL	IDE			
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128	RB1	NBR1	CCDC109B		MLLT11	FDX1	MRPL38			
129	CCNY	FKBP10	CCDC136		PRKCD	MRPS28	MRPL4			
130	HECTD3	SETD9	CCK		CEBPA	VDAC2	MRPL41			
131	NAA35	CSKMT	CCT7		CLIC1	SLC25A42	MRPL42			
132	TXNDC16	RPIA	CD24		ACSL4	TOMM7	MRPL43			
133	MED15	MT-ND6	CD3EAP		TRAK2	GATB	MRPL54			
134	BLOC1S6	PRKN	CDK1		SHARPIN	CMC1	MRPL55			
135	C8orf37	STYXL1	CDK7		GRN	TSFM	MRPL57			
136	PRRG2	NSUN2	CDKN2A		PACS2	FXN	MRPS12			

	A	B	C	D	E	F	G	H	I	J
137	PSME4	ADCY10	CDS2		RRP15	NFU1	MRPS18A			
138	TAB1	ETFBKMT	CECR5		AFF4	YARS2	MRPS2			
139	SCAF11	RTL10	CERK		KIF1B	MRPL21	MRPS24			
140	CHD1	SPIRE1	CFAP45		ARSB	ALDH4A1	MRPS26			
141	DRD4	ARMCX2	CHAT		P4HA1	TOMMM40L	MRPS34			
142	VAPA	ARMCX1	CHCHD2P9		ARMC1	NDUFAF1	MTCH1			
143	NOTCH2	POLB	CHMP2B		HIF1A	ACADSB	MTG2			
144	CDK10	SNAP29	CIAPIN1		SIRT1	MRPS9	MTHFD2L			
145	PCBP1	ARMCX6	CIDEA		TATDN3	MRPL15	MTPAP			
146	ZNF574	PIGBOS1	CISD2		VAMP8	MRPL24	MTRF1L			
147	MTF2	HTD2	CLN8		BRAF	HSPD1	MTX1			
148	STXBP5	RP11_469A15	CLU		RAB11B	NDUFS5	MTX3			
149	SPINT2		CNP		FIBP	AK3	NADK2			
150	GRK6		COL4A3BP		CKB	CYCS	NDUFA11			
151	KLHL23		COX1		MAP1B	MIPEP	NDUFA13			
152	ZNF576		COX2		SPATA5	LYRM7	NDUFA2			
153	NSMCE1		COX3		SIVA1	CRAT	NDUFA3			
154	STAG1		COX7A2P2		FYN	PCCB	NDUFA5			
155	RWDD4		CRYAB		SACS	MRPS7	NDUFA8			
156	CERT1		CRYM		CLUH	MRPL3	NDUFAF3			
157	DDHD1		CTPS2		PPP3R1	PRODH	NDUFB10			
158	DOHH		CTSB		TMEM102	PCCA	NDUFB11			
159	MPP6		CXADR		E2F1	MCCC1	NDUFB7			
160	OGFRL1		CXorf23		BSG	CLPB	NDUFS2			
161	SNAP23		CYB5A		CANX	MRPL49	NDUFS3			
162	TCF4		CYB5R1		HEATR1	COX7A2	NDUFS6			
163	NEMP2		CYB5R2		MAPK8	TMEM126A	NDUFS7			
164	REEP4		CYP17A1		RAI14	ECHDC2	NDUFS8			
165	GDAP2		CYP1A1		NAPG	HCCS	NDUFV1			
166	NAA25		CYP2D6			HIBADH	NIT1			
167	NUFIP2		CYP2E1			FARS2	NME3			
168	THOP1		CYTB			ABCB7	NME4			
169	KLHL17		DACT2			NDUFA7	NTHL1			
170	SRRT		DAO			TIMM17A	NUDT8			
171	LCLAT1		DAOA			ALDH9A1	OGDH			
172	SPPL2B		DCAF5			MRPS18C	OMA1			
173	INPP4A		DCPS			MARS2	OPA1			
174	TMEM123		DDAH1			ALDH6A1	OSGEPL1			
175	HEATR5A		DDIT4			FDXR	OXLD1			
176	TBL3		DDX23			GATC	OXR1			
177	DZIP1		DEGS1			ACAD8	PAM16			
178	LRFN4		DGAT2			ALDH2	PC			
179	BZW1		DHFRL1			PPIF	PCK2			
180	DDX54		DHX32			TIMM22	PDF			
181	ARF1		DISC1			IVD	PDK1			
182	SH3BGRL3		DNAJA1			L2HGDH	PHB			
183	RARA		DNM3			MRPL20	PICK1			
184	CISH		DPYSL2			SLC25A5	PMPCA			
185	DALRD3		DRG2			SLC25A12	PNKD			
186	DSE		DSP			MRPS21	POLDIP2			
187	RECQL		DUSP21			TOMM22	POLRMT			
188	TUBGCP2		DUSP26			ACAA2	PPM1K			
189	LEPR		DYNLL1			MRPL30	PPTC7			
190	DDR2		DYNLL2			NDUFB2	PRDX5			
191	PSMC3		ELK1			COX7C	PRELID1			
192	SWT1		ELN			CHCHD3	PRIMPOL			
193	TMEM238		EMC2			COQ10B	PTCD1			
194	R3HDM4		ENOSF1			ACSF3	PTCD2			
195	TASOR2		EPAS1			SLC25A13	PTGES2			
196	ZNF562		EPHA4			PDK3	PUS1			
197	CCNJ		ERBB4			ME3	PYCR1			
198	YAP1		ERN1			MRPL22	QTRT1			
199	TRPM4		ESR2			IDH2	RAB24			
200	FAM3A		ETNPPL			MRPL47	RHOT1			
201	PSMB10		EYA2			PPA2	RHOT2			
202	VPS13A		FADS1			MRPL9	RMDN1			
203	CD109		FAM110B			WARS2	ROMO1			
204	ARL5A		FAM65B			SLC25A19	SDHAF1			

	A	B	C	D	E	F	G	H	I	J
205	WIZ		FAM72A			SMDT1	SDHAF2			
206	CD320		FANCG			COX7A1	SDSL			
207	ECT2		FBXO7			MTG1	SLC25A1			
208	MEMO1		FDX1L			NDUFA12	SLC25A10			
209	PTPN2		FEN1			MRPS16	SLC25A11			
210	MGRN1		FEZ1			MTERF2	SLC25A22			
211	PNISR		FGR			NDUFA10	SLC25A24			
212	ZNHIT6		FITM2			NDUFC2	SLC25A28			
213	ERCC6		FKBP4			SLIRP	SLC25A30			
214	CHM		FLCN			TIMM21	SLC25A36			
215	JAG2		FLVCR1			DHTKD1	SLC25A39			
216	SIPA1		FNDC1			HSD17B8	SLC25A40			
217	PLP2		FOXO1			HINT2	SLC25A51			
218	KMT2E		FSIP2			MRPS5	SLC25A6			
219	DIPK2A		FTSJ2			SPRYD4	SOD2			
220	CARM1		GOS2			LIPT2	SPG7			
221	LLGL2		GABARAP			DECR1	SPR			
222	DESI2		GABARAPL1			SLC25A15	STOML2			
223	NAA50		GABARAPL2			NDUFV3	STX17			
224	PGLS		GABARAPL3			BPHL	SYNJ2BP			
225	ZNF672		GARS			MSRB2	TACO1			
226	TET2		GBAS			SLC25A25	TAZ			
227	UFL1		GBF1			ACAD10	TBRG4			
228	FAU		GCK			VWA8	TCAIM			
229	CLDN3		GCKR			CCDC90B	TFAM			
230	SDCCAG8		GCLC			DNAJC11	TIMM10			
231	DUSP8		GDF5OS			GLDC	TIMM13			
232	GET3		GGCT			MPC1L	TIMM17B			
233	ROGDI		GGNBP1			THEM4	TIMM44			
234	WDR47		GIMAP5			SSBP1	TIMM50			
235	DHFR2		GIMAP8			MRPL27	TMEM11			
236	ZNF436		GJA1			HSCB	TMEM65			
237	BABAM1		GK			MRPS10	TOMM40			
238	ERF		GK2			AK4	TRAP1			
239	CDON		GK3P			MRPL37	TRMT5			
240	NPRL2		GLRX			TXNRD2	TRNT1			
241	ARCN1		GLUL			ACSM5	TSPO			
242	DSTYK		GLYATL1			CISD1	TST			
243	GAN		GLYATL2			MRPS6	TUFM			
244	OSBPL3		GLYATL3			SCO1	TXN2			
245	MFSD4B		GM2A			GCAT	UQCR10			
246	SRRM1		GNB2L1			MTHFD1L	UQCR11			
247	MAF1		GNL3L			ECI2	UQCRC1			
248	CDC37		GNPAT			UQCRB	UQCRQ			
249	TTC33		GPD1			CCDC58	YME1L1			
250	ZNF445		GPOR1			MCCC2				
251	OVOL1		GRAMD4			MCEE				
252	TJP3		GSDMC			OXNAD1				
253	RPL36		GZMB			DARS2				
254	ACTN4		H6PD			MRPL51				
255	PLEKHA8		HAAO			CLYBL				
256	MYCBP2		HAP1			MLYCD				
257	KCNQ1		HAX1			PYURF				
258	MCM7		HCFC1			MRPL32				
259	FGF7		HCLS1			SLC25A26				
260	AGPAT2		HDDC2			PRODH2				
261	ESRP2		HDGFRP2			NIT2				
262	NBAS		HEBP2			ME2				
263	MYO5A		HERC2			COX6A2				
264	UBE4A		HGF			TAMM41				
265	MRTFB		HK1			TIMM23				
266	FBXL3		HK2			RMND1				
267	TOR1AIP1		HK3			MFN2				
268	GDPD3		HLCS			DNLZ				
269	UBE2J1		HOXB9			CHCHD4				
270	PARVA		HRK			NDUFAB1				
271	CEP112		HRSP12			ACSM1				
272	IL17RC		HSD3B1			COA5				

	A	B	C	D	E	F	G	H	I	J
273	H2AC13		HSD3B2			COQ2				
274	FEM1B		HSH2D			PDSS2				
275	LSM10		HSP90AA1			EHHADH				
276	GXYLT1		HSP90AB1			ABCB10				
277	RAVER1		HSPA1A			CKMT2				
278	CDC5L		HSPA1L			MRPS25				
279	AHI1		HSPA2			COX16				
280	PPP6R3		HSPA4			FAM210A				
281	PLXDC2		HSPA5			ACOT13				
282	ZNF254		HSPB7			CPT1A				
283	UBXN6		HTT			DHRS4				
284	PLCB1		ICT1			PRELID2				
285	TMEM150A		IDH1			CARS2				
286	PRICKLE2		IER3			GLRX2				
287	GRWD1		IFI6			MRPS30				
288	LRCH3		IFIT2			SCO2				
289	WDR19		IFIT3			NARS2				
290	POGLUT3		IGF1			SUOX				
291	SDF4		ILF3			SARDH				
292	AZI2		IQCE			MPV17				
293	TMEM134		IRG1			ZADH2				
294	CYB561A3		ISL1			MRPL18				
295	PPP1R15B		JTB			ALDH1B1				
296	KRTAP5-1		JUN			CHCHD1				
297	FAM168A		KANK2			TIMM8A				
298	TAF1B		KARS			VDAC3				
299	PANK3		KCNJ11			MPC1				
300	SLC1A3		KCNJ8			SLC25A31				
301	EOLA1		KCTD14			SLC25A18				
302	ZNF770		KIAA0141			GSTK1				
303	CDC42BPG		KIAA0391			VAR52				
304	ZNF420		KIAA1279			HSPE1				
305	ZNF12		KIAA1683			TRIAP1				
306	CSNK1G1		KIF28P			PTCD3				
307	APPBP2		KLK6			COX10				
308	OSBPL8		KRT5			AKAP1				
309	SLC6A9		KYNU			AK2				
310	UBL4A		LACE1			TMEM70				
311	SUZ12		LDHA			NOA1				
312	HES4		LGALS3			MCUR1				
313	EDIL3		LIG1			TMEM14C				
314	DNAJC3		LIN28B			NDUFC1				
315	CADPS2		LIPF			MRPL35				
316	RBMS1		LOC102723830			PDSS1				
317	MCPH1		LPIN1			SLC25A16				
318	TYSND1		LRRC10			ACSM3				
319	MAST4		LRRC59			NDUFAF6				
320	LPGAT1		LRRC75A-AS1			UCP1				
321	FLYWCH1		LRRK1			SFXN1				
322	NFKBIB		LRRK2			GLRX5				
323	HMG20B		LYN			PTRH1				
324	DPH6		LYRM5			MRPS11				
325	BBOF1		MAATS1			XPNPEP3				
326	ARID4B		MAP1LC3B			PDP1				
327	ANKRD40		MAP1LC3B2			SLC25A21				
328	C19orf73		MAP1LC3C			SLC25A29				
329	DLG1		MAP2K1			SLC25A45				
330	HMBOX1		MAPK10			NDUFB3				
331	OSGIN1		MAPK12			REXO2				
332	NUP50		MAPK14			GATM				
333	NOC2L		MAPK8IP1			TIMM10B				
334	KLHL42		MAPK9			SARS2				
335	VPS4B		MAPT			CHDH				
336	FAM133B		MARS			EARS2				
337	TMEM181		MAT2B			MTFMT				
338	SRSF10		MDH1			HARS2				
339	SLFN5		ME1			NDUFA4				
340	RBM42		MECP2			NAGS				

	A	B	C	D	E	F	G	H	I	J
341	UBXN2B		MED7			HSD17B4				
342	SORBS3		METTL12			NDUFAF7				
343	ARHGEF6		METTL20			OAT				
344	GNA13		MGEA5			MRPL50				
345	THAP4		MINOS1			COX7B				
346	DMXL2		MINOS1-NBL1			RARS2				
347	CYBRD1		MLXIP			LACTB2				
348	BBS7		MMACHC			CHCHD7				
349	SLC22A18AS		MMP2			SHMT2				
350	LRP6		MOAP1			MTHFD2				
351	RYK		MOBP			CPS1				
352	IRAK1BP1		MPDU1			RDH13				
353	MSL2		MPO			TRMT2B				
354	LEMD3		MPP7			GSR				
355	THAP1		MSTO1			TEFM				
356	MOSPD2		MTCP1			ACSF2				
357	ZNF181		MTHFD1			TRMU				
358	RMI1		MTM1			MRPS22				
359	C5orf24		MTOR			LAP3				
360	TSKU		MTUS1			GLUD1				
361	PICALM		MUT			HMGCL				
362	JOSD2		MYCBP			FHIT				
363	CLIC2		MYH10			MRPS33				
364	ATAD2B		MYL10			NUBPL				
365	WDR1		MYO1C			MPV17L				
366	MIB1		MYOC			ALDH18A1				
367	G3BP2		MYOM2			OXSM				
368	MAPRE3		NARS			TARS2				
369	TMEM209		NCBP1			DNAJC15				
370	DPM2		ND1			HIGD1A				
371	CNPY3		ND2			SLC25A44				
372	BCAR1		ND3			OXA1L				
373	WAC		ND4			SLC25A46				
374	EFNA1		ND4L			RDH14				
375	TLR1		ND5			GSTZ1				
376	CCDC107		ND6			COX6B2				
377	TADA3		NDFIP2			GLOD4				
378	C1orf122		NDUFC2-KCTD14			CROT				
379	METTL25		NEFH			AMT				
380	GADD45G		NEFL			PDPR				
381	PSMA7		NFKB1			NLN				
382	TMEM120A		NGB			BOLA1				
383	XRCC1		NLRP5			ALAS2				
384	PPP1R14B		NME1-NME2			ALDH7A1				
385	NSDHL		NMT1			IMMP2L				
386	RABEP2		NOL3			COX4I2				
387	SLC16A5		NOL6			MRPL39				
388	BAZ1A		NOL7			AADAT				
389	DNAJB12		NOP14			FUNDC2				
390	CARD8		NOS1			LYPLA1				
391	PNPLA6		NOS3			PDHA2				
392	MYO1B		NOX4			ACOT2				
393	WASHC4		NPTX1			MMAB				
394	SMC2		NRD1			PPOX				
395	FZD3		NRF1			ABCD3				
396	COMMD2		NT5C3A			SIRT3				
397	RAB28		NVL			LDHD				
398	CLDN4		NXNL1			MRPL45				
399	PGP		OAS1			C12orf65				
400	MPP5		OAS2			IMMP1L				
401	USP47		OGT			POLG				
402	HYAL3		OLFM4			ATPAF1				
403	METRNL		OPRD1			ALDH1L2				
404	RASAL2		P2RY1			COX18				
405	TNKS		P2RY12			CPOX				
406	RSRC1		PACRG			NNT				
407	PSMD5		PAK7			DCAKD				
408	COMMD5		PARG			SFXN3				

	A	B	C	D	E	F	G	H	I	J
409	TMEM167A		PARK2			DIABLO				
410	PPP1R2		PECR			COX8C				
411	TMED9		PERP			PXMP2				
412	DTX3L		PEX5			AGXT2				
413	NUP155		PFDN4			GLS2				
414	EXOC5		PGR			APOO				
415	DPY19L4		PHYHIPL			ACAD11				
416	TMEM208		PHYKPL			C5orf63				
417	CFLAR		PI4K2A			HOGA1				
418	TNKS2		PI4KB			TTC19				
419	CDC14A		PID1			GCSH				
420	SYMPK		PIM2			SIRT5				
421	SLC12A9		PIN4			GPT2				
422	RXRA		PINX1			TOMM6				
423	PTDSS2		PKM			FAM162A				
424	C12orf4		PLA2G15			ABCB6				
425	THAP2		PLA2G2A			DMGDH				
426	DDX49		PLA2G4A			SLC25A14				
427	EXD3		PLA2G4B			FAHD1				
428	JUND		PLA2G6			MCU				
429	SLFN12		PLIN5			CYP27A1				
430	TBCCD1		PNPLA7			FASTKD1				
431	HNRNPR		POLD3			MRPS31				
432	RFX3		PON2			ALDH1L1				
433	RBM41		PPARGC1A			HADHB				
434	H2BC17		PPARGC1B			TRIT1				
435	SLC66A2		PPL			CRLS1				
436	TM9SF3		PPM1E			SLC25A32				
437	POLR2M		PPP1R15A			AARS2				
438	FER		PPP2CA			KMO				
439	RAB21		PPP2CB			SFXN5				
440	YDJC		PPP2R2B			ELAC2				
441	ZNF391		PPP3CC			CPT1B				
442	ARFRP1		PRDX1			UCP3				
443	TMEM245		PRKCA			SLC25A27				
444	PARP10		PRKCE			SLC25A23				
445	CLCC1		PRNP			HEMK1				
446	EFNA2		PROSC			LETM2				
447	RAB5C		PRR5L			MSRA				
448	HGS		PSAP			NMNAT3				
449	PDGFRA		PSEN1			SLC25A38				
450	TARBP2		PSEN2			ACLY				
451	CDC42		PSMD10			ABCD2				
452	FRY		PSTK			LIPT1				
453	RUFY2		PTRF			NUDT13				
454	TMX3		PTS			ACACA				
455	LPP		PVRL2			ABAT				
456	AP1G1		QARS			HMGCS2				
457	CARHSP1		QTRTD1			ALDH5A1				
458	NPRL3		RAB11A			CKMT1A				
459	PRSS3		RAB11FIP5			PISD				
460	KPNA5		RAB29			NDUFB4				
461	ZSCAN12		RAB32			FAM136A				
462	ZNF518A		RAB35			TOMM5				
463	CFAP410		RAB3A			NDUFA1				
464	RHBDF1		RAB3D			OPA3				
465	ZNF688		RAB40AL			PHYH				
466	ZNF791		RAD51			NDUFAF2				
467	VWA1		RAD51C			PARL				
468	SHLD2		RAF1			ALDH3A2				
469	EDRF1		RAI1			ACSL6				
470	CNOT6		RAP1GDS1			MRS2				
471	TIAM1		RARS			ABHD10				
472	SFT2D2		REEP1			NUDT2				
473	AGO4		RGS2			CYB5B				
474	NAPA		RHBDD1			GRSF1				
475	AQR		RIPK1			MRPS18B				
476	CLOCK		RMDN2			DNAJC30				

	A	B	C	D	E	F	G	H	I	J
477	FAM91A1		RNASEL			CAT				
478	PHTF2		RNF185			DGUOK				
479	CXXC1		RNF5			ACOT9				
480	CCDC66		RNMTL1			ACSS1				
481	ARHGAP24		RNR2			RFK				
482	ARMCS		RPL10A			STARD7				
483	ZDHHC21		RPL35A			TIMMDC1				
484	B3GALNT2		RPP14			SPATA19				
485	MACF1		RPS14			DUT				
486	DAXX		RPS3			MTRF1				
487	TMEM79		RPS6KA6			TMEM143				
488	MSR1		RSAD2			NT5M				
489	ADAMTS5		RUNX1T1			MICU2				
490	XRN1		SARM1			PCBD2				
491	HEXD		SARS			QRSL1				
492	ICE1		SCCPDH			NIPSNAP1				
493	GALNT1		SDS			ACSM2A				
494	MDM4		SECISBP2			SLC25A33				
495	GOLM2		SESN2			PARS2				
496	HDHD2		SGK1			MRPL52				
497	WDR13		SH3BP5			GOT2				
498	RLIM		SHC1			PTRH2				
499	MOSPD3		SHMT1			PGS1				
500	MUC20		SHOX2			SLC25A53				
501	C1QTNF3		SIAH3			MGST1				
502	CHAF1A		SLC16A1			MTFP1				
503	ELP2		SLC22A4			COA4				
504	MAP3K11		SLC25A17			NIF3L1				
505	BTBD2		SLC25A2			MAVS				
506	PPM1L		SLC27A2			METT17				
507	CLTA		SLC27A3			ACACB				
508	TRIM15		SLC35B3			ARG2				
509	CFAP97		SLC35F6			CCDC51				
510	TWF2		SLC3A1			SUGCT				
511	SIGIRR		SLC44A1			TMEM126B				
512	ZNF433		SLC4A5			NSUN4				
513	TSC2		SLC8A3			ACSS3				
514	THOC6		SLC9A1			RBFA				
515	TSEN54		SLC9A6			METAP1D				
516	IRAK3		SLC9B2			FUNDC1				
517	ZNF224		SLIT3			ACSL1				
518	CEP192		SLMO1			COX20				
519	SAV1		SLMO2			HSDL1				
520	CDK6		SMCP			MTERF4				
521	GPR137B		SMIM4			NUDT19				
522	ZNF281		SNCA			HEBP1				
523	ELL		SNCB			PTPMT1				
524	EMC6		SNN			PGAM5				
525	BORCS6		SNPH			DTYMK				
526	CHD9		SORD			STAR				
527	TIGD5		SOX10			DNAJC19				
528	NAA10		SOX4			OTC				
529	ZFP1		SPARC			COX7A2L				
530	RPS28		SPATA18			MTERF3				
531	KIAA0232		SPG20			SFXN2				
532	PTOV1		SQRDL			PINK1				
533	CYB5R4		SRI			TXNRD1				
534	C3orf38		SRP19			THNSL1				
535	DAPK3		ST20			FDPS				
536	MGA		STAP1			IDI1				
537	MNAT1		STARD13			FTMT				
538	ZZZ3		STARD3			MTFR1				
539	PDS5B		STAT3			BCL2L13				
540	AP1S2		STXBP1			TRMT10C				
541	SPART		SYBU			TFB1M				
542	STK17B		SYNE2			MMADHC				
543	ATP6V0B		SYNJ2BP-COX16			LYRM1				
544	MYO7B		TAP1			PET100				

	A	B	C	D	E	F	G	H	I	J
545	CHORDC1		TAT			GDAP1				
546	NOP16		TCHP			MTIF3				
547	NUP153		TDH			UNG				
548	METTL26		TDRD7			GLYAT				
549	TEDC2		TERT			QDPR				
550	HIPK3		TFDP1			MRPS36				
551	UBE2M		TGM2			PDP2				
552	GNB4		TH			AGPAT5				
553	PRRX1		TMEM173			UCP2				
554	PLXNC1		TMEM8B			SLC25A37				
555	RHPN1		TNFSF10			SLC25A48				
556	LGALS4		TNNC1			SLC25A43				
557	CEP350		TOMM70A			SLC25A47				
558	AAAS		TP53			SLC25A41				
559	TNIP2		TP53AIP1			SLC25A34				
560	DNAJB9		TP73			MICU1				
561	WDR18		TPO			SOD1				
562	SIL1		TPP1			SERHL2				
563	RACK1		TRAF3			OCIAD2				
564	SURF6		TRAK1			RSAD1				
565	TKFC		TRIM31			PEX11B				
566	NABP1		TRIM39			TMEM186				
567	NF1		TSHZ3			PIF1				
568	TMOD3		TUSC3			ABCD1				
569	ZNF227		TXN			DBI				
570	ZNF25		TXNIP			PNPT1				
571	EML4		TYMP			TOP1MT				
572	RAB18		TYMS			RNASEH1				
573	TBL1XR1		UBB			ABCA9				
574	TMEM168		UBIAD1			SCP2				
575	VEZF1		UCHL1			NT5DC3				
576	TMEM214		URI1			CMC4				
577	ARMC7		UROS			LDHB				
578	NCOA2		USMG5			YBEY				
579	CD47		UXS1			MUL1				
580	SSBP4		UXT			TK2				
581	NCOA4		VAMP1			AGMAT				
582	ZFR		VAR5			CMPK2				
583	CD302		VASN			BID				
584	ZMYM6		VAT1			MFF				
585	NAP1L1		VHL			NUDT9				
586	JMJD8		VHLL			AMACR				
587	SPPL2A		WDR45			NUDT6				
588	TMTC2		WDR45B			BAK1				
589	CLCN2		WIPI1			DHODH				
590	SH3BGRL		WIPI2			MAOB				
591	TP53INP1		WWOX			ACP6				
592	EIF4EBP3		XAF1			MRPL48				
593	APC		XRCC3			AGXT				
594	ACVR2B		YKT6			DDX28				
595	COPS6		YWHAB			MICU3				
596	TAF6L		YWHAE			BNIP3				
597	C21orf91		YWHAG			MUTYH				
598	NUP54		YWHAH			CYP11A1				
599	PAFAH1B2		YWHAQ			OCIAD1				
600	STRN4		YWHAZ			RPUSD4				
601	ANKRD54		ZBED8			NME6				
602	PIGQ		ZFYVE1			ACSM4				
603	RAB31		ZNF202			NLRX1				
604	DDHD2					FOXRED1				
605	GTF2H3					TFB2M				
606	UBXN4					MSRB3				
607	RABEP1					SFXN4				
608	CGGBP1					SLC25A52				
609	YTHDF3					OGG1				
610	KRT18					RMDN3				
611	INPPL1					PET117				
612	CAMK2D					MAOA				

	A	B	C	D	E	F	G	H	I	J
613	FNIP1					BCO2				
614	UBE2Q2					IFI27				
615	ROCK2					TMLHE				
616	TJP1					TOMM20				
617	EXOSC4					YRDC				
618	ARHGAP42					COA7				
619	KDSR					DHRS2				
620	GPR137					MMAA				
621	FAM50A					MIEF1				
622	METRNL					LIG3				
623	AIMP2					FASTKD5				
624	UGCG					PARK7				
625	ZNF180					COX7B2				
626	FAM214A					SIRT4				
627	SDF2L1					UQCC2				
628	TBC1D10B					USP30				
629	KRT19					PDE12				
630	TMPPE					CYP24A1				
631	PATJ					PANK2				
632	EPB41L5					CA5A				
633	ZNF692					PRKACA				
634	AURKB					CPT1C				
635	MUS81					SND1				
636	CYP20A1					GLUD2				
637	CLDN7					PRDX4				
638	PELI1					MGARP				
639	SMC4					CYP11B2				
640	INO80B					PMAIP1				
641	GIT1					TDRKH				
642	PRKAR1B					SLC8B1				
643	APLF					CYP27B1				
644	CST3					POLG2				
645	CAB39					THEM5				
646	IL1RAP					BIK				
647	EIF3K					MTERF1				
648	H2AC21					MTFR2				
649	NUS1					TOMM20L				
650	ARHGAP45					OXCT2				
651	ARNTL2					ACSM2B				
652	UGGT1					MYO19				
653	PIK3CB					MGME1				
654	AKT1S1					EFHD1				
655	RBSN					APEX1				
656	TMEM101					SPTLC2				
657	YOD1					NEU4				
658	TMEM94					CASP9				
659	DCP2					AGK				
660	RITA1					MCL1				
661	APBB2					DUS2				
662	SNX8					PLD6				
663	ACTR3C					TOMM34				
664	XPR1					PLSCR3				
665	TMEM115					NDUFB1				
666	IFT81					BCL2L1				
667	ATP13A1					ARMC10				
668	USF3					THG1L				
669	CASKIN2					GOLPH3				
670	LSM11					FASTKD3				
671	FAM207A					CEP89				
672	ZBTB7B					GPAT2				
673	PLK1					BOK				
674	GTF3C3					CYP11B1				
675	NTMT1					BCL2				
676	SWAP70					BCL2A1				
677	FRK					BCL2L2				
678	ALDOA					CASP3				
679	CTTNBP2NL					DMPK				
680	KXD1					ALKBH1				

[illegible]

Supplementary Table 2

hTFtarget	KnockTF	JASPAR	PROMO	hTFtarget	hTFtarget	hTFtarget	KnockTF	KnockTF	JASPAR	PR	hTFtarget	hTFtarget	KnockTF	hTFtarget	KnockTF	JASPAR	PROMO
BRD3	ARID1A	TEAD3	abaA	EP300	SP1	TBP	NR3C1	FOXO1	FOXO4	GATA2	MAZ	STAT3	YY1				
BRD4	ZNF43	TFAP2B	ABF1	BMI1	CTCF		ELK1	FOXO1	FOXO3	MYB	POU2F1		FOXA1				
CBFβ	POLR3A	BHLHE23	AB14		BCL11A		GATA3		HOXA4	MYC	STAT1						
CDK7	POSTN	BHLHE22	Adf-1		BHLHE40		JUN		HOXB7	RELA	USF1						
CDK9	RBM17	CLOCK	ADR1		E2F1		XBP1		HOXB8	SP1	AR						
HDAC1	RBFOX2	FIGLA	AGL3		EGR1		HIF1A		HOXD10	TP53	FOXA2						
MED1	ZNF622	HES5	AIRE		ELF1		ESRRA		POU6F1	E2F6	POU5F1						
POLR2A	RBM39	HES7	ALF1B		ERG		TFAP4		HOXD8	E2F7	SRF						
RAD21	BCLAF1	HEY1	Alfin1		ETS1		MYCN		HOXD9	TP63	VDR						
RUNX1T1	U2AF2	MNT	aMEF-2		FLI1		KLF7			FOXI1	MITF						
RXRA	TARDBP	OLIG1	AMLL1a		GLIS1		TCF7L1			SRY							
STAG1	EWSR1	OLIG3	ANF		IRF4		TEAD2			HOXA5							
TAF1	HNRNPPLL	SREBF2	ANT		KLF1		ATF4			CDX2							
NOTCH1	AGO2	TFE3	Antp		MAX		RELB			HSF1							
BRCA1	DROSHA	ATF7	AP-1		NRF1		ZNF213			POU2F2							
ARID3A	HNRNPUL	CEBPE	AP-2		PAX5		E2F2			USF2							
GTF3C2	PSIP1	CEBPG	AP-2alpha		REST		FOXK2			DBP							
HCFC1	KDM3A	CREB3L1	AP-2alphaA		RUNX1		PLAG1			PKNOX1							
KDM5B	ZNF165	NFE2	AP-3		RUNX3		IRF2			POU1F1							
KMT2A	EZH2	NRL	AP3:PI		RXRg		ZNF574			POU3F1							
PHF8	NFKBIZ	TEF	AREB6		SP1B					POU3F2							
PRAME	ARID3B	FOXO1	ARP-1		TCF12					ATF3							
RBBP5	CREBBP	FOXC2	AT-BP1		TCF3					HOXA9							
UBTF	ZFP36L1	FOXO2	AT-BP2		ZNF143					HOXA3							
SMC3	HNRNPU	FOXO6	ATHB-1		RBPJ					FOXO3							
ARNT	GLI1	RXRβ	ATHB-5		ESR1												
SIN3A	DDX5	TP73	B		ZBTB17												
GTF2B	DNMT1	GMEB2	BR-C		CEBPD												
MED12	ILF2	MTF1	BTEB3		CTCFL												
SMC1A	STRAP	E2F8	BTEB4		E2F4												
TAF3	USP22	SOX21	C/EBP		GATA1												
BCOR	MAEL	SOX4	C/EBPalpha		IRF1												
SAP30	USP7	SOX8	C/EBPbeta		JUND												
TAF7	PURA	TFEC	C/EBPbeta(p20)		MXI1												
EZH1	CBX2	HOXD12	C/EBPdelta		NFYA												
JMJD6	TXNIP	BARX1	C/EBPgamma		THAP1												
NCOR1	SMARCA1	BSX	C1		ZBTB7A												
RNF2	CIZ1	CDX1	C1-I		ZNF263												
RYBP	FUBP1	DLX6	CAC-binding		ZNF384												

ATOH1	ETF
ATOH7	Eve
BARX2	f(alpha)-f(epsilon)
BHLHA15	FACB
CDX4	FOXA4a
CREB3L4	FOXF1
DLX5	FOXI1a
DMRTA2	FOXJ1
DMRTC2	FOXJ2
DPRX	FOXN2
DRGX	FOXO3a
ELF2	Ftz
FERD3L	FXR
FOXE1	GA-BF
FOXN3	GABP
GLI3	GABP-alpha
HES6	GAGA
HNF4A	GAL4
HOXA6	GAMMYB
HOXA7	GATA-1
HOXB4	GATA-2
HOXB6	GATA-3
HOXB9	GBF
HOXC4	GCF
HOXC8	GCM
HOXD4	GCMa
IKZF1	GCMb
IRF6	GCN4
KLF10	GCR1
KLF11	GR
KLF15	GR-alpha
KLF17	GR-beta
KLF2	Gt
KLF3	GT-1
KLF6	GT-1b
LHX1	Hb
LHX5	HBP-1
MAF	HBP-1a(1)
MAFA	HBP-1a(c14)
MSANTD3	HELIOS
MSGN1	HES-1
NFATC4	HFH-1
NFIC	Hif
NFIX	HMG
NHLH2	HNF-1
NKX6-3	HNF-1A
NR1D1	HNF-1B
NR1D2	HNF-1C
NR1I2	HNF-3
NR1I3	HNF-3gamma
NR2C1	HNF-4alpha
NR2C2	HNF-4alpha1
NR2F1	HNF-4alpha2
NR2F6	HNF-6
NR5A1	HNF-6beta
NR6A1	HOX11
OSR1	HTF
OVOL1	Ik-4
OVOL2	INSAF
PAX3	IPF1
PITX2	IRF-1
PLAGL2	IRF-2
PPARD	IRF-3
RARB	IRF-7A
RARG	Isl-1
RFX7	JunB
SMAD5	JunD
SNAI1	LCR-F1
SNAI3	LEF-1
SOHLH2	LF-A1
SOX12	Lhx3a
SOX14	LIM1
SOX18	LVb-binding
SP9	LVc
TBX18	LyF-1
TBX3	LYS14
TBX6	MAC1
TCF21	MafG
TFAP2E	mat1-Mc
TGIF2LX	MATa1
TGIF2LY	MATalpha1
THAP11	MATalpha2
THRB	MBF1
TLX2	MBP-1
VEZF1	MCB1
ZBTB26	MCB2
ZBTB32	mec-3
ZBTB6	MED8
ZFP57	MEDEA
ZIC5	MEF1
ZKSCAN1	MEF-2C/delta8
ZNF135	MEF-2DAB
ZNF136	Meis-1a
ZNF140	Meis-1b
ZNF274	MF3
ZNF317	MIF-1
ZNF382	MIG1
ZNF460	MNB1a
ZNF528	MRF-2
ZNF682	Msx-1
ZNF684	mtTFA
ZNF75D	muEBP-C2
ZSCAN29	MYB2
BARHL1	MYBAS1

HES1	MYBST1
HOXB5	Myf-3
HOXD3	Myf-5
DMRTA1	MyoD
HOXB1	myogenin
PAX8	MZF-1
ZIM3	Ncx
ZNF257	NF-1
ZNF343	NF-1/L
ZNF454	NF-AT1
ZNF524	NF-AT2
ZNF610	NF-AT3
ZNF675	NF-AT4
ZNF707	NFdeltaE3A
ZNF75A	NF-E4
ZNF766	NFI/CTF
ZNF770	NF-kappaB
ZNF784	NF-kappaB(-like)
ZNF8	NF-kappaB1
ZNF816	NF-muNR
ZNF85	NF-X3
ZNF93	NF-Y
ZSCAN16	NHP-1
ZSCAN31	NIT2
PRDM9	Nkx2-1
ATF2	Nkx2-5
BACH1	Nkx6-2
BATF	NRF-1
EBF3	Nrf2:MafK
HAND2	octamer-binding
MEIS1	Oct-B1
MEIS2	Opaque-2
MYF5	OSH15
NEUROG2	p300
NFIB	p53
NFYC	Pax-2
NKX2-2	Pax-2a
OSR2	Pax-4a
PRDM4	Pax-5
ZBTB12	Pax-6
ZBTB14	Pax-8
ZFP42	Pax-9a
ZKSCAN5	Pax-9b
ZNF148	PBF
ZNF16	Pbx1b
ZNF341	PDR1
ZNF449	PDR3
ZNF652	PEA3
FOXA3	PEBP2
ZNF189	PEBP2alphaA1
ZNF331	PEND
ZNF417	PHR1
ZNF549	POU1F1a
ZNF677	POU1F1b
ZNF680	POU1F1c
ZNF708	POU2F1a
ZNF768	POU2F1b
BATF3	POU2F1c
SREBF1	POU2F2B
BNC2	POU2F2C
ELK1::HOX	POU4F1(I)
ELK1::HOX	POU5F1(Oct-5)
ELK1::SREB	PPAR-alpha
ERF::FIGLA	PPAR-alpha:RXR-alpha
ERF::FOXJ1	PR
ERF::FOXO	PR-alpha
ERF::HOXB	PR-beta
ERF::NHLH	Prd
ERF::SREBF	PTF1
ETV2::DRG	PTF1-beta
ETV2::FIGL	Pu
ETV2::FOXJ	PU.1
ETV2::HOX	PUR
ETV5::DRG	PXR-1:RXR-alpha
ETV5::FIGL	R
ETV5::FOXJ	R1
ETV5::FOXJ	R2
ETV5::HOX	RAR-beta
FLI1::DRGX	RAR-beta2
FLI1::FOXJ	RAR-gamma
FOXJ2::ELF	RC2
FOXO1::EL	RCS1
FOXO1::EL	RelA
FOXO1::EL	RF2a
FOXO1::FL	RITA-1
HOXB2::EL	ROM1
HOXD12::E	ROM2
MGA::EVXJ	ROX1
PATZ1	RP58
POU2F1::S	S8
SATB1	SBF-1
SMAD2	SGF-3
SP5	Smad3
TFAP4::ETV	Smad4
TFAP4::FLI	Sn
TFCP2	Sox13
THRA	Sox2
TRPS1	Sp1
ZBED2	Sp3
ZFP14	SPF1
ZKSCAN3	Spz1
ZNF211	Staf
ZNF214	STAT1beta
ZNF320	STAT4

ZNF324 STAT5A
ZNF354A STAT5B
ZNF416 STAT6
ZNF418 STE12
ZNF530 SWI4
ZNF582 SWI6
ZNF667 SXR:RXR-alpha
ZNF669 T3R-alpha
ZNF692 T3R-alpha1
ZNF701 T3R-beta1
FOXP4 T3R-beta2
NKX2-4 TAF
DLX1 T-Ag
ZNF281 Tal-1
NFI3 TCF-1(P)
FOXF2 TCF-1A
FOXD1 TCF-2
FOXC1 TCF-3
FOX11 TCF-4
HLF TCF-4E
NHLH1 TF68
MEF2A TFII8
MZF1 TFIIID
MAX::MYC TFII-I
NFKB1 TGA1a
PPARG:RX TGGCA-binding
PPARG TGIF
PAX6 TGT3
PBX1 TII
RORA TMF
RREB1 TRM1
RXRA::VDR Ttk
SOX9 Ubx
TEAD1 UME6
TAL1::TCF2 unc-86
REL USF
NR1H2::RX USF-1
NFIC::TLX1 USF2b
NKX3-1 VBP
ZNF354C v-Myb
HINFP Vpr
EWSR1-FLI1 VSF-1
NFE2L2 WIZZ
NFATC2 WRKY2
HNF1B WT1
INSM1 XPF-1
FEV Xvent-1
FOXO3 YAP1
RARA::RXR Yi
NR4A2 Zen-1
ESR2 Zen-2
ARNT::HIF1 ZF5
SOX10 Zic1
BATF::JUN Zic2
CEBPB Zic3
DUX4 Zta
FOSL1
FOSL2
HNF4G
MEF2C
MAF::NFE2
NFYB
PRDM1
RFX5
RUNX2
SP2
STAT1::STAT2
ZBTB33
CEBPA
EBF1
GATA1::TAL1
ZEB1
FOXP2
EHF
RFX2
DMRT3
EMX1
FOXP1
LBX1
NFATC3
SHOX
ALX3
BARHL2
BHLHE41
CREB3
ELF3
ELF4
ELF5
EN1
EN2
ESX1
ETV6
GCM1
GRHL1
GSC
HEY2
HNF1A
HOXA13
HOXC11
IRF8
IRF9
ISX
JDP2
KLF13

LHX6
MAFG
MEF2B
MEOX1
MIXL1
MLX
MLXIPL
MSC
MSX1
MYF6
NEUROD2
NFIA
NKX2-3
NKX2-8
NKX6-1
NKX6-2
OLIG2
ONECUT1
PAX4
PAX7
POU4F2
SP4
SPDEF
SPIC
TBXT
TBX2
TBX20
TBX21
TFEB
ZBTB7B
ZBTB7C
ZIC1
ZIC3
ZBTB18
LBX2
LHX2
LHX9
LMX1A
LMX1B
MEOX2
MNX1
MSX2
NKX3-2
NOTO
OTX1
PDX1
PHOX2A
PITX3
PROP1
PRRX1
RAX2
RAX
RHOXF1
UNCX
VAX1
VAX2
VENTX
VSX1
VSX2
ESRRB
NR3C2
RARA
BCL6B
EGR2
EGR3
EGR4
GLI2
GLIS2
GLIS3
HIC2
KLF14
KLF16
SCRT1
SCRT2
SNAI2
SP3
SP8
YY2
ZBED1
ZIC4
ZNF410
ZNF740
CUX1
CUX2
ONECUT2
ONECUT3
ERF
ETV2
ETV3
ETV4
ETV5
GATA5
GCM2
LEF1
HSF2
HSF4
IRF7
MEF2D
MEIS3
MYBL1
MYBL2
NFKB2
PAX1
PAX9

PKNOX2
POU3F3
POU3F4
POU4F1
POU4F3
POU5F1B
POU6F2
PROX1
SMAD3
TGIF1
TGIF2
RFX3
RFX4
EOMES
MGA
TBR1
TBX15
TBX19
TBX1
TBX4
TBX5
KLF4
GFI1
HES2
HOXC9
NEUROG1
PITX1
PRRX2
TCFL5
GATA4
MYOD1
MYOG
MAFG::NFE2L1
NKX2-5
PHOX2B
POU2F3
RFX1
TCF7
CREM
FOXS1
ZNF184
PAX2
KLF12
EPAS1
IKZF2
ZBED4
ZBTB11
ZBTB24
ZNF157
ZNF175
ZNF35
ZNF547
ZNF558
ZSCAN21
FEZF2

O00154	380	41795.8	8.66	Cytosolic a	ACOT7	ACOT7	Cytosolic a	9	2546.667	49.5902	9.09E-55	9	30
Q8WXI4	607	68491.6	8.43	Acyl-coen;	ACOT11	ACOT11	Acyl-coen;	2	213.7966	39.01141	1.37E-23	2	3.789127
Q99798	780	85424.7	7.65	Aconitate l	ACO2	ACO2	Aconitate l	4	140.5527	46.60838	2.06E-44	4	5.769231
P21399	889	98398.1	6.66	Cytoplasm	ACO1	ACO1	Cytoplasm	3	97.86398	49.78581	1.75E-55	3	4.16198
P53396	1101	120838.3	7.34	ATP-citrat	ACLY	ACLY	ATP-citrat	16	351.0869	50.27297	2.71E-57	16	17.43869
Q9UKV3	1341	151860.1	6.36	Apoptotic	ACIN1	ACIN1	Apoptotic	39	4876.519	51.31789	3E-61	39	36.98732
Q96AP0	458	48966.7	4.97	Adrenocor	ACD	ACD	Adrenocor	2	148.2831	41.11096	1.62E-28	2	6.331878
Q9H3P7	528	60593	4.73	Golgi resid	ACBD3	ACBD3	Golgi resid	7	147.899	51.56175	3.47E-62	7	19.88636
P24752	427	45199.2	9.21	Acetyl-Co/	ACAT1	ACAT1	Acetyl-Co/	5	686.1778	49.82262	1.28E-55	5	13.34895
Q15057	778	88027.9	6.78	Arf-GAP w	ACAP2	ACAP2	Arf-GAP w	3	72.29487	44.64315	3.09E-38	3	5.269923
P49748	655	70389.6	9.1	Very long-	ACADVL	ACADVL	Very long-	20	1376.896	52.22693	9.17E-65	20	35.57252
P45954	432	47485	7	Short/bran	ACADSB	ACADSB	Short/bran	8	554.8825	52.97577	1.07E-67	8	20.60185
P16219	412	44296.7	8.12	Short-chai	ACADS	ACADS	Short-chai	2	56.25594	34.12718	1.37E-14	2	5.339806
P11310	421	46588	8.51	Medium-c	ACADM	ACADM	Medium-c	5	371.9126	51.52767	4.69E-62	5	14.72684
Q9H845	621	68759.7	8.05	Complex l	ACAD9	ACAD9	Complex l	8	940.9514	53.88946	2.37E-71	8	12.07729
Q9UKU7	415	45069.4	7.91	Isobutyryl-	ACAD8	ACAD8	Isobutyryl-	10	1773.184	49.08575	6.17E-53	10	28.6747
Q709F0	780	87263.7	8.11	Acyl-CoA	ACAD11	ACAD11	Acyl-CoA	6	505.9562	49.11481	4.85E-53	6	9.358974
Q6JQN1	1059	118833	8.13	Acyl-CoA	ACAD10	ACAD10	Acyl-CoA	5	91.20609	49.54231	1.36E-54	5	7.082153
O00763	2458	276538.6	6.46	Acetyl-Co/	ACACB	ACACB	Acetyl-Co/	5	385.5679	44.54058	6.27E-38	1	2.644426
Q13085	2346	265551.7	6.32	Acetyl-Co/	ACACA	ACACA	Acetyl-Co/	9	226.7194	49.48054	2.3E-54	9	4.603581
P09110	424	44291.6	8.55	3-ketoacyl	ACAA1	ACAA1	3-ketoacyl	5	150.0725	49.67801	4.33E-55	5	13.91509
A6QL63	1104	120882.9	6.82	Ankyrin re/	ABTB3	ABTB3	Ankyrin re/	2	69.79295	44.72336	1.77E-38	2	1.992754
Q9ULW3	272	31078.7	10.44	Activator c	ABT1	ABT1	Activator c	7	410.8386	50.35044	1.4E-57	7	34.19118
Q15018	415	46900.4	6.15	BRISC com	ABRAXAS2	ABRAXAS2	BRISC com	4	99.43488	48.4922	8.06E-51	4	10.60241
O94929	683	77800.9	8.62	Actin-binc	ABLM3	ABLM3	Actin-binc	2	57.45895	36.8206	3.96E-19	2	3.806735
Q6H8Q1	611	67811.5	7.99	Actin-binc	ABLM2	ABLM2	Actin-binc	1	608.3931	24.44162	1.59E-06	1	1.472995
O14639	778	87686.8	8.69	Actin-binc	ABLM1	ABLM1	Actin-binc	3	59.54531	45.32752	2.51E-40	3	5.141388
Q9NYB9	513	55662.8	6.08	Abl interac	ABI2	ABI2	Abl interac	4	142.9239	52.53035	6.01E-66	3	9.356725
Q8IZP0	508	55080.4	7.08	Abl interac	ABI1	ABI1	Abl interac	2	211.4522	45.55541	4.88E-41	2	5.314961
Q9BV23	337	38330.4	8.54	Monoacylc	ABHD6	ABHD6	Monoacylc	1	48.30321	37.13912	9.82E-20	1	3.560831
Q66IU4	210	22345.5	6.39	Putative pr	ABHD14B	ABHD14B	Putative pr	4	164.5777	53.11778	2.89E-68	4	26.66667
Q8N2K0	398	45096.3	8.82	Lysophosp	ABHD12	ABHD12	Lysophosp	3	141.0972	46.3769	1.17E-43	3	9.547739
Q8NFV4	306	33746.6	9.56	sn-1-spec	ABHD11	ABHD11	sn-1-spec	2	106.8021	24.50921	1.52E-06	2	10.13072
Q9NUJ1	306	33932.2	8.77	Palmitoyl-	ABHD10	ABHD10	Palmitoyl-	4	664.4984	46.5645	2.87E-44	4	15.35948
Q9NUQ8	709	79743.9	6.27	ATP-bindi	ABCF3	ABCF3	ATP-bindi	7	968.2079	45.71475	1.54E-41	7	11.42454
Q9UG63	623	71289.7	7.4	ATP-bindi	ABCF2	ABCF2	ATP-bindi	15	2583.431	52.39395	2.05E-65	15	25.36116
Q8NE71	845	95925.2	6.77	ATP-bindi	ABCF1	ABCF1	ATP-bindi	13	525.2453	52.73171	9.86E-67	13	19.52663
P61221	599	67313.7	8.45	ATP-bindi	ABCE1	ABCE1	ATP-bindi	14	986.5271	49.69171	3.86E-55	14	26.71119
P28288	659	75475.3	9.75	ATP-bindi	ABCD3	ABCD3	ATP-bindi	16	1578.617	51.5308	4.56E-62	16	30.95599
P33897	745	82936.1	9.2	ATP-bindi	ABCD1	ABCD1	ATP-bindi	4	74.381	48.86122	3.94E-52	4	6.845638
O15439	1325	149525.3	8.31	ATP-bindi	ABCC4	ABCC4	ATP-bindi	1	14.93912	28.18881	3.24E-08	1	0.603774
P33527	1531	171589.5	7.11	Multidrug	ABCC1	ABCC1	Multidrug	4	92.42783	47.02433	8.67E-46	4	3.592423
Q9NY61	560	63132.3	4.56	Protein AA	AATF	AATF	Protein AA	9	380.0774	54.47316	1E-73	9	25
Q9NRRN7	309	35775.6	6.79	L-aminoac	AASDHPP	AASDHPP	L-aminoac	6	162.4614	43.28961	2.67E-34	6	22.3301
Q5JT29	985	107339.5	6.2	Alanine--t	AARS2	AARS2	Alanine--t	1	193.227	47.46994	2.75E-47	1	1.522843
P49588	968	106809.5	5.18	Alanine--t	AARS1	AARS1	Alanine--t	21	673.8882	54.41019	1.86E-73	21	26.23967
Q9Y312	384	43471.8	5.83	Protein AA	AAR2	AAR2	Protein AA	2	58.34837	43.04903	1.25E-33	2	6.770833
Q13685	434	46750.6	4.04	Angio-ass	AAMP	AAMP	Angio-ass	6	186.4713	50.79851	2.87E-59	6	14.74654
Q9NRG9	546	59573.6	7.53	Aladin	AAAS	AAAS	Aladin	2	316.3484	48.40521	1.63E-50	2	4.029304
P01023	1474	163289.9	6.43	Alpha-2-n	A2M	A2M	Alpha-2-n	9	203.914	47.52447	1.8E-47	8	7.666214