

Distance from HIF site	name	mean p-value	p-value range in 100 iterations	found significant in 100 iterations	found in foreground	found in background	range in background /total	genes	organism	References illustrating relevance to HIF-1 (PubMed ID)
±25	SP	0.00120	1.6e-06-9.9e-03	100	6/81	10/881	5-17/881	BNIP3, CAD, P4HA2, R3HDM1, RBPJ, WSB1	chick, clawed frog, domestic pig, hamster, human, monkey, mouse, rabbit, rat	15342781
±75	ATF6	0.00005	1.3e-06-4.4e-04	98	4/81	2/881	1-4/881	LDHA, OXSR1, SPAG4, WSB1	human	
	JUN:ATF2	0.00012	1.3e-06-4.4e-04	100	4/81	2/881	1-4/881	LDHA, OXSR1, SPAG4, WSB1	chick, human, mouse, rat	11739718, 17189420
	CREB1	0.00058	2.2e-06-5.9e-03	100	5/81	6/881	3-11/881	LDHA, OXSR1, PJA2, SPAG4, WSB1	HTLV-I, cattle, hamster, human, mink, mouse, rat	16854377
	CREB:ATF	0.01887	1.3e-04-9.4e-02	96	3/81	4/881	1-8/881	LDHA, OXSR1, SPAG4	clawed frog, gibbon ape, human, mouse, rat	8524640
±100	WT1	0.02165	1.3e-04-9.4e-02	93	3/81	4/881	1-8/881	LDHA, SNRPD1, STC2	human, mouse, rat	12738801
±125	SP1	0.01905	8.4e-04-6.7e-02	94	8/81	29/881	20-38/881	ASCC1, MIF, NF2, OXSR1, P4HA2, R3HDM1, RBPJ, TGFB1	human, mouse, rat	15342781
±150	PAX2	0.00040	1.3e-04-4.0e-03	53	3/81	1/881	1-3/881	ATF7IP, NDRG1, RARA	chick, human, mouse, zebra fish	
	ATF2	0.00057	2.2e-06-3.5e-03	100	5/81	6/881	3-10/881	LDHA, OXSR1, PER2, SPAG4, WSB1	human, mouse	17189429
	SRY	0.00154	1.3e-06-1.2e-02	99	4/81	4/881	1-8/881	ATF7IP, EFNA1, MRPL4, TMEM45A	human, mouse	
Entire promoter	MAT1	0.00000	2.8e-09-5.9e-05	100	6/81	4/881	2-8/881	ABC2, EFNA1, MRPS12, MX11, NAMPT, WSB1	fission yeast	
	FOXD1	0.00002	3.7e-08-1.4e-04	100	6/81	6/881	3-9/881	CCNB1, CLK3, DHX40, GOPC, MX11, TMEM45A	human	
	CACD	0.00007	2.2e-06-4.3e-04	100	5/81	4/881	3-7/881	ALDOC, ASPH, CRKL, GYS1, OXSR1	mouse	
	FOXO4	0.00010	8.5e-07-1.0e-03	100	7/81	11/881	7-16/881	ANKRD37, ATF7IP, CLK3, DDIT4, EFNA1, JMJD1A, LOX	human, mouse	
	AHR:HIF-1	0.00022	1.7e-05-4.4e-04	100	4/81	3/881	2-4/881	ANKRD37, EIF2B3, P4HA2, PER2	guinea pig, human, killifish, mouse, pig, rabbit, rat	
	NFIC	0.00055	1.3e-06-3.1e-03	100	4/81	3/881	1-6/881	MRPL4, NAMPT, OXSR1, TPCN1	cat, chick, clawed frog, domestic pig, hamster, human, monkey, mouse, rat, sheep	
	STAT	0.00063	1.7e-05-2.6e-03	100	8/81	18/881	13-23/881	EFNA1, FH, GADD45B, GRK6, INSIG2, LOX, PGK1, SPAG4	human, mouse, rat, sheep	
	ID1	0.00070	1.3e-05-3.5e-03	100	5/81	7/881	4-10/881	GYS1, MRPS12, MX11, PJA2, WSB1	maize	
	TP53:TP73	0.00076	1.7e-05-1.3e-03	100	4/81	4/881	2-5/881	ATF3, DDIT4, NAMPT, RBPJ	Chinese hamster (Gray hamster), cat, cattle, dog, golden (Syrian) hamster, human, macaque, monkey, mouse, pig, rabbit, rat, sheep	
	FOXF2	0.00188	2.2e-06-9.4e-03	100	5/81	8/881	3-12/881	CAD, CLK3, DDIT4, DHX40, EFNA1	human	
	GRH	0.00294	1.3e-04-4.0e-03	100	3/81	2/881	1-3/881	C3orf28, CXCR4, NF2	Caenorhabditis elegans, fruit fly	
	EBOX	0.00476	4.8e-05-2.0e-02	100	7/81	18/881	11-25/881	CAD, JMJD2B, JMJD2C, RARA, RBPJ, RSBN1, SLC16A1	Avian myelocytomatosis virus CM11, Avian myelocytomatosis virus MC29, Feline leukemia provirus FTT, HBI, Kenyan clawed frog, MH2E21, OK10, canary, cattle, chick, chimpanzee, clawed frog, common carp, common marmoset, dog, domestic pig, duck, gibbon ape, goldfish, hamster, human, monkey, mouse, quail, rabbit, rainbow trout, rat, sheep, wild cat, woodchuck, zebra fish	
	EGR	0.00479	5.1e-04-1.6e-02	100	10/81	35/881	28-42/881	C14orf169, ERO1L, GYS1, INSIG2, KLF10, PJA2, R3HDM1, SEC61G, SLC16A1, TGFB1	human, monkey, mouse, rat	
	REB1	0.00522	1.3e-04-1.1e-02	100	3/81	3/881	1-4/881	ATF3, R3HDM1, RARA	yeast	
	NRF1	0.00541	8.2e-04-1.3e-02	100	13/81	53/881	45-60/881	ANKRD37, ASCC1, ATF7IP, EDEM3, EIF1, GOPC, HIG2, ILF3, JMJD1A, NARF, P4HA1, PPME1, SFRS7	human, monkey	
	BACH2	0.00814	1.3e-04-4.0e-02	99	3/81	3/881	1-6/881	JMJD1A, RBPJ, SFRS7	human, mouse	
	FOXJ1	0.01085	1.1e-04-4.3e-02	100	4/81	7/881	3-11/881	ANKRD37, MRPL4, MX11, OXSR1	human, mouse, rat	
	TBX5	0.01155	4.3e-04-3.8e-02	100	5/81	12/881	7-16/881	ATF3, KLF10, R3HDM1, RARA, RSBN1	chick, clawed frog, human, mouse	
	MIBP1:RFX1	0.01657	1.3e-04-4.0e-02	100	3/81	4/881	1-6/881	PPME1, SNRPD1, TPCN1	human	
	MAFB	0.01700	1.0e-03-4.0e-02	100	3/81	4/881	2-6/881	ATF3, LDHA, SPAG4	Rattus	
	USF2:USF1	0.01848	1.3e-05-6.3e-02	97	5/81	13/881	4-18/881	JMJD2C, RARA, SLC16A1, STC2, TPCN1	Kenyan clawed frog, chick, duck, hamster, human, mouse, rabbit, rat	
	FOXA1	0.02149	4.4e-04-7.9e-02	92	4/81	8/881	4-13/881	CAD, DDIT4, EFNA1, MX11	human, rat	
	RBPJ	0.02425	4.7e-03-7.2e-02	96	6/81	19/881	15-25/881	CCNB1, FH, LOX, R3HDM1, RARA, RBPJ	fruit fly, human, mouse	
	FOXJ2	0.02631	1.9e-03-1.1e-01	90	5/81	14/881	9-21/881	CLK3, EFNA1, LOX, MX11, RSBN1	human, mouse	
	YY1	0.02732	8.8e-03-5.6e-02	94	12/81	58/881	51-65/881	ASCC1, ATF7IP, CRKL, EIF2B3, GOPC, ILF3, INSIG2, JMJD1A, PJA2, R3HDM1, SNRPD1, WSB1	chick, human, mouse, rat	
	PHO4	0.02929	1.3e-04-1.3e-01	86	3/81	5/881	1-9/881	BNIP3, GADD45B, JMJD2B	yeast	
	FOXO1	0.03347	3.5e-03-1.4e-01	83	5/81	15/881	10-22/881	ATF7IP, CAD, CLK3, DDIT4, EFNA1	human, mouse	
AP-1	0.03451	6.9e-03-1.3e-01	80	7/81	26/881	21-36/881	ACTR1A, ATF7IP, HIG2, JMJD1A, RBPJ, SFRS7, SPAG4	ASV 17, Japanese pufferfish, Japanese quail, chick, clawed frog, domestic pig, fruit fly, gibbon ape, hamster, human, monkey, mouse, rat, yeast		
BR	0.03944	5.0e-03-8.9e-02	74	7/81	27/881	20-33/881	DDIT4, ERO1L, HIG2, MRPL4, MX11, NXF1, OXSR1	fruit fly		

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Up Regulated	± 75	ATF6	6E-06	2.5e-08-1.4e-04	88	4/60	2/860	1-5/860	LDHA, OXSR1, SPAG4, WSB1	human
		JUN:ATF2	8E-06	2.5e-08-1.4e-04	91	4/60	2/860	1-5/860	LDHA, OXSR1, SPAG4, WSB1	chick, human, mouse, rat
		CREB1	1E-04	4.2e-08-1.4e-03	100	5/60	7/860	3-12/860	LDHA, OXSR1, PJA2, SPAG4, WSB1	HTLV-I, cattle, hamster, human, mink, mouse, rat
		CREB:ATF	7E-03	9.5e-06-5.1e-02	97	3/60	4/860	1-9/860	LDHA, OXSR1, SPAG4	clawed frog, gibbon ape, human, mouse, rat
	± 100	NRF1	9E-03	2.9e-04-3.6e-02	100	6/60	21/860	14-29/860	ANKRD37, EIF1, HIG2, JMJD1A, NARF, P4HA1	human, monkey
	± 150	ATF2	1E-04	2.6e-09-2.3e-03	100	5/60	6/860	2-13/860	LDHA, OXSR1, PER2, SPAG4, WSB1	human, mouse
	Entire promoter	ID1	2E-05	2.5e-08-1.4e-04	100	4/60	3/860	1-5/860	GYS1, MXI1, PJA2, WSB1	maize
		AHR:HIF-1	6E-05	9.5e-06-1.2e-04	95	3/60	1/860	1-2/860	ANKRD37, P4HA2, PER2	guinea pig, human, killifish, mouse, pig, rabbit, rat
		TP53:TP73	9E-05	6.3e-07-1.4e-04	100	4/60	4/860	2-5/860	ATF3, DDIT4, NAMPT, RBPJ	Chinese hamster (Gray hamster), cat, cattle, dog, golden (Syrian) hamster, human, macaque, monkey, mouse, pig, rabbit, rat, sheep
		FOXO4	1E-04	6.0e-07-8.2e-04	100	6/60	11/860	7-16/860	ANKRD37, CLK3, DDIT4, EFNA1, JMJD1A, LOX	human, mouse
		PHO4	3E-04	9.5e-06-2.3e-03	92	3/60	1/860	1-4/860	BNIP3, GADD45B, JMJD2B	yeast
		FOXO1	5E-04	2.1e-06-2.3e-03	100	5/60	9/860	5-13/860	CLK3, DHX40, GOPC, MXI1, TMEM45A	human
		FOXO2	2E-03	6.3e-06-1.1e-02	100	4/60	7/860	3-11/860	CLK3, DDIT4, DHX40, EFNA1	human
		EBOX	2E-03	3.9e-05-7.4e-03	100	6/60	17/860	11-22/860	JMJD2B, JMJD2C, RARA, RBPJ, RSBN1, SLC16A1	Avian myelocytomatosis virus CM11., Avian myelocytomatosis virus MC29., Feline leukemia provirus FTT., HBI, Kenyan clawed frog, MH2E21, OK10, canary, cattle, chick, chimpanzee, clawed frog, common carp, common marmoset, dog, domestic pig, duck, gibbon ape, goldfish, hamster, human, monkey, mouse, quail, rabbit, rainbow trout, rat, sheep, wild cat, woodchuck, zebra fish
		BACH2	3E-03	9.5e-06-2.1e-02	100	3/60	3/860	1-7/860	JMJD1A, RBPJ, SFRS7	human, mouse
		CACD	4E-03	1.9e-04-1.5e-02	100	5/60	13/860	9-18/860	ALDOC, ASPH, CRKL, GYS1, OXSR1	mouse
		STAT	6E-03	5.0e-04-2.5e-02	100	6/60	20/860	15-27/860	EFNA1, GADD45B, INSIG2, LOX, PGK1, SPAG4	human, mouse, rat, sheep
		TBX5	7E-03	4.1e-04-3.2e-02	100	4/60	9/860	6-14/860	ATF3, KLF10, RARA, RSBN1	chick, clawed frog, human, mouse
		FOXJ2	9E-03	1.9e-04-2.6e-02	100	5/60	15/860	9-20/860	CLK3, EFNA1, LOX, MXI1, RSBN1	human, mouse
		FOXO1	1E-02	1.2e-04-5.1e-02	99	3/60	5/860	2-9/860	DDIT4, EFNA1, MXI1	human, rat
		ZEB1	1E-02	2.6e-03-3.5e-02	100	8/60	36/860	31-45/860	EFNA1, INSIG2, KLF10, NAMPT, P4HA1, RBPJ, STC2, TMEM45A	chick, chicken, human
		STRA13	1E-02	1.2e-04-5.1e-02	97	3/60	5/860	2-9/860	JMJD2C, RARA, SLC16A1	mouse
		MAFB	2E-02	2.3e-03-3.4e-02	100	3/60	6/860	4-8/860	ATF3, LDHA, SPAG4	Rattus
		EGR	2E-02	3.8e-03-4.9e-02	100	7/60	32/860	26-39/860	ERO1L, GYS1, INSIG2, PJA2, SEC61G, SLC16A1, TGFB1	human, monkey, mouse, rat
		EIP74EF	2E-02	7.7e-04-6.1e-02	96	5/60	17/860	11-24/860	ANKRD37, GOSR2, INSIG2, PPME1, RSBN1	fruit fly
		MAT1	2E-02	4.0e-03-5.5e-02	98	4/60	12/860	9-16/860	EFNA1, MXI1, NAMPT, WSB1	fission yeast
		FOXJ1	2E-02	2.3e-03-7.1e-02	85	3/60	7/860	4-10/860	ANKRD37, MXI1, OXSR1	human, mouse, rat
		STF12	2E-02	2.3e-03-7.1e-02	91	3/60	7/860	4-10/860	JMJD1A, RARA, STC2	yeast
		VDR	3E-02	2.3e-03-9.5e-02	78	3/60	7/860	4-11/860	EIF1, NDRG1, RARA	chick, domestic pig, human, mouse, rat
	FOXO1	3E-02	3.6e-03-8.5e-02	85	5/60	20/860	14-26/860	CLK3, DDIT4, DHX40, EFNA1, MXI1	clawed frog, human, mouse, rat	
	USF1	3E-02	4.0e-03-7.9e-02	85	6/60	27/860	20-34/860	JMJD1A, JMJD2B, JMJD2C, LDHA, RARA, SLC16A1	chick, duck, hamster, human, mouse, rat	
	MYOD1	3E-02	4.0e-03-1.0e-01	80	4/60	13/860	9-19/860	JMJD2C, OXSR1, RBPJ, TGFB1	chick, clawed frog, human, mouse	
	PAX6	4E-02	2.3e-03-1.2e-01	58	3/60	8/860	4-12/860	DHX40, PER2, TMEM45A	Japanese quail, chick, clawed frog, human, mouse, rat, zebra fish	

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Down regulated	± 100	SP1	0.0116	1.6e-04-4.9e-02	100	3/21	18/881	10-28/881	CAD, NF2, R3HDM1	human, mouse, rat
	± 125	NF-Y	0.0015	3.8e-05-7.3e-03	100	4/21	23/881	16-32/881	ABCF2, CYCS, FH, MRPL4	chick, clawed frog, human, long-tailed hamster, mouse, rat, yeast
	Entire promoter	CBF:NF-Y	0.0026	2.7e-04-7.3e-03	100	4/21	26/881	20-32/881	ABCF2, MRPL4, NF2, TPCN1	human, mouse, rat
		RBPJ	0.0048	7.2e-05-1.1e-02	100	3/21	16/881	9-20/881	CCNB1, FH, R3HDM1	fruit fly, human, mouse
		YY1	0.0114	3.8e-03-2.9e-02	100	5/21	50/881	43-60/881	ATF7IP, EIF2B3, ILF3, R3HDM1, SNRPD1	chick, human, mouse, rat