Supplementary Table 1. Nomenclature and classification of yellow lupine PR-10 proteins and genes identified in a yellow lupine cDNA library.

cDNA	Gene name	Protein name	Number of aminoacids*	Molecular weight (kDa)	Isoelectric point (pI)**	GenBank Acc. No.
subclass LlPR-10.1						
Llpr-10.1a	*LlYpr-10.1a*	LlPR-10.1A	**156**	**16 859**	**5.19**	**X79974**
Llpr-10.1b	*LlYpr-10.1b*	LlPR-10.1B	**156**	**16 655**	**5.35**	**X79975**
Llpr-10.1c	*LlYpr-10.1c*	LlPR-10.1C	**156**	**16 749**	**5.08**	**AF180941**
subclass LlPR-10.2						
Llpr-10.2a	*LlYpr-10.2a*	**LlPR-10.2A**	**158**	**16 904**	**4.95**	**AF170091**
Llpr-10.2b	*LlYpr-10.2b*	**LlPR-10.2B**	**158**	**16 888**	**4.81**	**AF170092**
Llpr-10.2c	*LlYpr-10.2c*	**LlPR-10.2C**	**158**	**16 805**	**4.81**	**AF322225**
Llpr-10.2d	*LlYpr-10.2d*	**LlPR-10.2D**	**158**	**16 812**	**4.85**	**AF322226**
Llpr-10.2e	*LlYpr-10.2e*	**LlPR-10.2E**	**157**	**16 869**	**4.85**	**AY288355**
cytokinin-specific binding proteins LlCSBP						
Llcsbp1	*LlYcsbp1*	LlCSBP1	**158**	**17 875**	**4.81**	**AF288708**
*Llcsbp2****	*LlYcsbp2*	LlCSBP2	**155**	**17 399**	**4.73**	**-**

* including the initial Met
** theoretical values, based on aminoacid contents (program COMPUTE pI/Mw; http://expasy.hcuge.ch/)
*** lacking 15nt at 5' end of coding region

Supplementary Table 2. Nucleotide sequence identity (%) among the subclass *Llpr-10.2* members: within the coding sequence (left) and for full cDNA sequence (if known) (right).

Gene	***2a***	***2b***	***2c***	***2d***	***2e***	***2f***
2a	100	93.2	93.5	99.1	90.3	90.8
2b		100	99.7	93.2	90.7	91.2
2c			100	93.5	90.9	91.4
2d				100	90.7	91.2
2e					100	98.9
2f						100

Gene	***2a***	***2b***	***2c***	***2d***	***2e***	***2f****
2a	100	76.4	77.5	97.2	71.3	-
2b		100	80.4	77.3	66.7	-
2c			100	77.9	72.7	-
2d				100	71.8	-
2e					100	-
2f*						100

**Llpr-10.2f was identified as a genomic clone (cDNA length and full 3' UTR sequence is not known).*

Supplementary Table 3. Potential regulatory sites in deletion fragments of *LlYpr-10.2* promoters.

Motif	Sequence of the motif	Function of the motif (origin of the motif)	Frequency of the motif in the deletion fragments of *LlYpr-10* genes promoters			
			LlYpr-10.2b		*LlYpr-10.2f*	
			short 585bp	long 1212bp	short 671bp	Long 1350bp
1		2	3	4	5	6
abaA	CATTCT AGAATG	ABAA; activator of developmentally regulated genes, necessary for spore differentiation (*Aspergillus nidulans)*		1N/R		 1N/R
ACF	AACCAAT	albumin CCAAT-binding factor (rat)		1N		
AFP1	ATTATTAA TTAATAAT	Transcription factor (human)	1R	1R 1N		
AML1	TGTGGT	CBFA2; PEBP2alphaB (human);site recognized by AML-1a - runt-related transcription factor AML-1 (implicated in leukemogenesis)			1N	2N
Antp	tTTAATAATTA	Site recognized by Antp, HOXA5 & Zen-1& 2 factors		1R		
AP-1 AP-3 (2) AP-4	TAACTCA TGAGTCA TTAGTCA TTAGTAA GTGACATCAT TGTGTCA AGTTTCA TTAATCA TGATTAA TGAATCA ATGAATCATc WWWCCACA CAGCTG	Fos/Jun (human); PEA1 (mouse); AP1; (Jun)2; composed of two subunits: two Jun-peptides or one Jun- and one Fos-peptide (or relatives); down-modulated by glucocorticoids through direct interaction with GR; induced by TPA; in yeast involved in response to oxidative stress / oxygen detoxification and metal resistance; common sites (esp. TGAGTCA) with different transcription factors: c-Fos, c-Jun, CRE-BP1, CRE-BPa, NF-E2, Zta, Opaque-2, Fra-1, JunD, v-Jun, MafK, NF-E2 p45, HNF-3, CWH-1,2; AP4 site – common with Myo-D, HEN1, E12, XPF1 (animal)	1N 1N/R 1N/R 1R	1N 1N/R 1N/R 1N/R 1R	1N 1N 2N 1N 1N 1R	1N 1N 1N 2N 1N 2N 1R 2N/R 2N 1N/R
AR	TGTTCT AGAACA	androgen receptor (rat); binding to androgen-responsive elements (ARE); site recognized also by GR & PR transcription factors	1N	2N		1N 1R
AT-com	TAAT ATTA	AT com traits; specific for heat shock proteins genes	13N 17N	25N 29N	10N 10N	17N 17N
AT-rich	TATTAA TATTTTAT (Ford seq)	Ford consensus sequence - spec.for late nodulin genes	2N	5N	1N 1N	2N 1N
auxRE	TGTCTC---AATAAG	auxine-response element	1N	1N	½N	½N
B factor	TATAAAA TTTTATA TATAAATA	RNA polymerase II transcription factor (*Drosophila*); site recognized also by human Dr1 (transcription repressor, binds to TBP and competitively inhibits TBP-TFIIA–interaction when phosphorylated), *Drosophila* EN (Engrailed; active repressor;), TBP, TMF, TFII & TRF	1N 1R 1N	1N 1R 1N	2N 2N	3N 2N
BBF1	TAAAGT	rolB domain B factor 1 (*Nicotiana*	1R	2R	1R	1R

	ACTTTA	*tabacum*); NtBBF1; Dof				2N
C/EBPα α, β, δ α, β β, δ C/EBP C/EBPα C/EBPβ	GTGGWWWG CWWWCCAC TTNNGTAA ATTTcGTAAC GTTGGG ATTGgACAAT TGtGTGCACA CTGAGAAAT GTTTGCT ATTAGGA	EBP20; C/EBP; BPc; CBP; (mouse, human, chick, rat); critically involved in energy homeostasis, regulating the balance between cell growth and differentiation; TNF-alpha reduces the level of C/EBPalpha and, thus, the expression of its target genes	1N 1R	1N 2R 1N 1R 1R 1N		 1N 1N 1N 1N
c-Ets-1 c-Ets-2	ACcGGATGTA GGGAAG AAGGAA TTCCTT	p54; Ets1; important role in mesodermal cell development for organ formation and tissue modeling (mouse); increases after T-cell induction (human)			 1N/R 1N/R	1N 1N 1N/R 1N/R
c-Maf	TGcTGANNNNNNNGGAAA AT	transcriptional activator involved in Th2–specific gene activation, synergizing with NF-ATp (mouse)				1R
c-Myb	TTCAAT TCTCTTA ATTGAA AAGTTC GAACTG	in haematopoietic system & tumor cell lines; enhances DNA polymerase alpha expression in T lymphocytes; required for G1/S transition; expression of the c-myb gene is enhanced by c-Jun and JunD, but not JunB, through an AP-1 element, but also by autostimulation through multiple binding sites (human)	1R 1N	3R 1N 1N 1R		 2R
c-Myc	TCTCTTA	proto-oncogene involved in cell proliferation control, may induce apoptosis; negatively regulated by AP-2 and autoregulated (human)			2N	2N
Cap signal	AAGACTGA	cap signal for transcription initiation				1N
CAAT box	CAAT	transcription initiation; recognized by factors: ACF, C/EBPα, c-Myb, CPC1, En, GATA–1, Pit-1A, Sox-5	4N	13N	3N	8N
CBF (2)	CYSATTgGYY	CP1; NF-Y; CCAAT-binding factor; CBF-A + CBF-B; (rat, mouse)				1R
CBP-1	TAtCAYGTGA TCACRTgATA	heat stable, centromere (CDE I) binding protein, implicated in chromosome segregation and transcriptional activation (mouse)			1R	1R 1N
CCBF	RNNYCACgAAAA	cell cycle box factor; SBF; SCB; SWI4+SWI6; mediates cell-cycle dependent transcription of HO gene and START-specific transcription (yeast)				1N
Cdx-1	TTTATA TATTAAT	sites recognized by Cdx-1; chicken CdxA homeobox gene, but also by TBP, TFIID, B factor & TMF	2N 2N	4N 5N		
CF2–I	TATATTATA TATAATATA	late activator in follicle cells during chorion formation (Drosophila)	1N	1N	1R	1R
CPC1	ATGAGTCAT AACCAAT	bZIP factor (*Neurospora crassa*); common site with GCN4 & SKO1	1R	1R 1R		
DBP	YTTAcRTAAY GTTCTAA	transcriptional activator in hepatic cells; member of C/EBP-family (rat)		1R		 1N
delta factor	AAATGG WNNNAANAWGG	F-ACT1; NF-E1 (2); YY-1; YY1; binds to ribosomal protein gene promoters (mouse)		1R 1R		2R
Dof, PBF	AAGTAAAGCTT	Sites recognized by plant single		1R		

	CACTAAAGTTC AAAAAAAGAAA AATAAAAGGGA ACTAAAAGTTA TTTAAAAGCAA TTTTAAAGCAT TTTTAAAGTAA TGAAAAAGAAA GAGCAAAGGAG TTAAAAAGTCA AAATAAAGTGA ATGAAAAGGAA GAAAAAAGCTA GAGCAAAGGAG GTCAAAAGTAG TCTTAAAGTAC CCATAAAGTAT AGTAAAAGTAT AATGAAAGGAA	zinc finger transcription factors: Dof proteins and PBF protein; with AAAG as the core sequence (TESS: BBF1 sites:TAAAGT & ACTTTA)	1R 1N 1N 1R 1N	1N 1R 1R 1N 1R 1R 1N 1N 1R 1N	1N 1N 1R 1R 1R	1N 1N 1R 1R 1R 1R 1R 1R 1R 1R
E12	GACATGTGgC	TCF3; E2A.E12; E2A–E12; Pan-2; E2–alpha; ubiquitous activator; probably involved in tissue-specific gene regulation of muscle, lymphoid, or neural cells; growth-inhibitory activity (human, rat)			1N	1N
E4BP4	RTKAYGTAAY RTTACRTMAY	NF-IL3A; transcriptional repressor (adenovirus E4 promoter) or activator (interleukin 3) (human)			1N 2R	2N 3R
EFII	TGCATA	Ebhancer corresponding to dimers of distinct C/EBPbeta isoforms (quail)	1R	1R	1R	1R
En	ATTTAATTgA TCAATTAaAT	active repressor (Drosophila); competing with TFIID for TATA–binding; activated by pair-rule gene products (e. g., Ftz, Prd, Zen) acting synergistically; activates its own transcription; site recognized also by Ftz, Oct-2.1, Prd, Zen-1, Zen-2	1R 1N	1R 1N		
ERE	TGTCA	part of the elicitor response element	1N	3N	2N	2N
ETF	ATAAATA TATTTAT	Transcription repressor; active on the EGF receptor gene (human)	1N	2N 2R	2N	2N 1R
Freac-6 Freac-7	KNNTRTTtRTTTA tAAAYAAAYANNM TRTTTATNTNNW WNNANATAAAYA	Forkhead RElated ACtivator-6; FKHL10; HFH3; HFH-3 (human)	1N	2N 1N	 1R 2N	 1R 2N
Ftz	CTTACTTGCTT GTTAAtTGCTT	fushi tarazu (*Drosophila*); activator; pair-rule gene product; positively autoregulated; antagonists of En		1R		1R
GAL4	ATATAA TTATAT	Activator; mediates galactose response; repressed by GAL80; binds to DNA and to nucleosome-assembled DNA (yeast)	2N 4R	3N 6R	5N 1R	7N 1R
GARE	TAACAAA	gibberellin-response element	2N	2N		

GATA–1	CTATCC GCCTATcAAT CAATCT CTATCT TCTATC TGATAG TGATTA TGATAA GATAATC GATAAA TTATCTCT TTATCT TAATCA AGATAC AGATAA AGATAG CGATAA ATATCG TTTATC TtATCANNNNNNNATATC T	EF1; EFgammaa; Eryf-1; GF-1; NF-E1 (1); activator; required for erythroid differentiation; stimulated by erythropoietin; required for transcription of other EPO-induced genes; synergistic effects of GATA–1 and Sp1 (); negative regulator of gamma-globin in adults; down-regulated by TPA; up-regulated by aclacinomycin (ACM); acts on the PBGD and gamma-globin promoter in association with Sp1 or CCACC binding proteins (mouse, human, *Xenopus*)	1R 1R 1R 1N/R	2R 1R 1R 1N/R 1N/R 1N/R 1N	1R 1N 1N/R 1R 1N 3N 3N/R 2R 1R 1N/R 1R	1R 1N 1N/R 1R 1N 3N 3N/R 4R 1R 1N/R 1N/R 1R 1N 1R
GATA–3			1N	1N		
GATA–3, 4, 5A/B, 6A/B	CTATCT AGATAT ATATCT		1N/R 1N/R	1N/R 1N/R	1N/R 1N/R	1N/R 1N/R
GC1	ATTTATTcAT	Rat transcription factor		1R		
GC-box-like	GGGGC	GC box-like (GGGCGG), respos. for constitutive expression		1N	1N	1N
GCN4	SKRTgASTCAYMS SkRTGASTCAYMS ATTAGTCAT GAGTCA TTACTC TAGTCA ATGAATAAT TGATTC AAGTCA TCGTCA GAATCA TGAGTG	activator of genes involved in protein and purine biosynthesis; significant enhancement of dimerization by Tax (yeast)	1N/R 1N/R 1R 1N/R 1N 1R	1N/R 1N/R 1R 1N/R 2N 1R 1N 1N	1R 1N 1R	1R 2R 1N 1R 2R 1N
GKLF	RAANRARRRARRGG	gut-enriched Krueppel-like factor; EZF; epithelial zinc-finger; activator; very low levels during early embryogenesis; down-regulated during tumor formation (mouse)	1N	1N		1N
GR, AR, PR	AGTTCA ACAACA TCTTCT (A)TGTTCT (also AR, PR) ATCACA TGTGAT TGTGTC TGTGCC TGTACA AGAAGA AGAACA (also AR) TGAACT	glucocorticoid receptor (rat, mouse); mediates gene induction / repression by glucocorticoids; act through composite elements where it cooperates with other transcription factors; cooperates with AF1, AF2; represses Oct-1 DNA binding; some sites common with AR & PR factors: PR - progesterone receptor (rabbit, chick); activator or repressor in response to progesterone;	1R 1N 1N 1N	2R 1N 1N 1N 1R 1N	1N 2N 1R 2R 1N 1N/R 1R	1N 2N 1N 2R 1N 2R 1N 1N/R 1R 1R 1N
GRE	AGAACA---TGTTCT	glucocorticoid-response element (GRE): NAGAACANNNTGTTCTN				1N
GT-1	AGTGTAaATC	nuclear factor interacting with light-responsive elements upstream of the rbcS-3A gene (pea)			1R	1R
GT-IIB alpha, beta	ACAGCTG	motif in the domain B1 of the SV40 enhancer (human)				1N

H4TF-1	GAAATC	zinc-dependent transcription factor; constant during cell cycle (human)			1R	1R
Hb	AcATAAAAAA AAAAAAATCg TTATTTTTTT AaAAAAATAA AcATAAAAAA GAAAAAGAAAaA AAAaAAATAA TTTtTTAATG SMATAAaAAA CGATTTTtTT TTTTTTATGT TTATTTATTTg CAAATAAATAA SMATAaAAAA	Hunchback; gap gene; regulates Krueppel; activates eve stripe 2 element; anterior suppression of Ubx through bx region enhancer (BRE); activator of engrailed (*Drosophila*)	1N 1R 1N 1R 1N 1N 1R	1N 1R 3N 1R 1N 1N 2R 2N 1N 1N 1R 1R 1N	1N	1N 1N
HFH-1	AAATAAACAATA	fork head domain recognized by hepatocyte nuclear factor			1N	1N
HiNF-A HiNF-A, B	AGAAATG ATtTCGTCATTT	H4TF-1 homolog histone gene transcription factor	1N	1N	1N	1N
HNF-1 HNF-3 HNF-3B	GGTTAG ATTAAC TRTTTGY TATTTAC TATTGAYTTWg RCAAAYA GTTTGTTTT TTTGTTT VAWTRTTKRYTY RARYMAAYAWTB	LF-B1; HNF-1; HNF1; APF; HNF-1alpha; activator, 5–fold more potent than HNF-1A; synergistic interaction with C/EBPalpha; involved in hepatocyte-specific gene expression; cooperates with other liver-enriched factors such as C/EBP, HNF-3, HNF-4; down-regulates its own expression (human, rat); TTTGTTT - site recognized also by SRY - sex-determining region Y gene product	1N 1N 2N 1N 3N 1R	1N 3N 3N 2N/R 1R 6N 4R	 1N 2R	 1N 1R 1N 1R 2N 2R
HOXA5	CYYNATTAKY	Chox-1.3; Hox-1.3; Hoxa-5; homeo domain gene (mouse, chick)				1N
HSF, HSTF	AGAAA TTTCT GTTCT	heat shock factor sites (*Drosophila*)	3N 2N 1N	4N 3N 1N	3N	3N 3N 1N
ICSBP	GAAGTGAAAc	IFN consensus sequence binding protein; transcriptional repressor, IRF-1 antagonist acting through ISREs; inhibits binding of ISGF3 to ISREs; induced by IFN-gamma; activated through a STAT-like element (mouse)				1R
Ik-1, 2	GGGAAT TTCCCA	LyF-1; Ikaros 1; critical role in development of the lymphocyte lineage(s) (mouse)		2N		1R
IL-6 RE-BP	CTGGAA	functionally synergistic with glucocorticoid receptor (human, rat)				1N
INO2	GATGTGAAAT	Ino2p; SCSI; SCS1; activator of phospholipid synthesis; (yeast)			1N	2N
IRF-1 IRF-1, 2	CTTtCTCTTT AAaGAGAAAG AAGTGA GAAAtGGAAAG	ISGF2; positive regulator of interferon-beta expression; tumor suppressor; induced by IL-6, IFN-gamma, SGF3 (being a target gene of STAT1) and prolactin in lymphoma cells; immediate-early gene product of differentiated cells; required for normal thymocyte development and NO synthase induction in macrophages (mouse, human, rat)	1N	1N 1N	 1N 1N	1R 2N 1N

IUF-1	CATTAC	insulin upstream factor 1; (human)	1R	3R		2R
MBF-I	GAGTGCA	binds to metal response elements (MRE), related to Sp1 and MTF1 involved in metallothionein regulation (mouse)				1R
MCM1	CCTaATTAGT	GRM; PRTF; repressor of a-specific genes in cooperation with MATalpha2; activator of replication of DNA; regulator of cell cycle, synthesis of cell wall/ membranes, cell metabolism,heat-shock-inducible secreted glycoprotein (yeast)				1R
MEF-2	CTATAAATAA CTATAtATAC TTATTTTTAA YTWWAAATAR TTATTTTTAg TTAAtTATAA TTAAAAATAA YTATTTWWAR CTAAAAATAA GTATATAtAG	Activator involved in myogenesis; cooperates with myogenic bHLH factors (mouse, rat, human, *Xenopus*)	1N 1N 1N/R 1N	1N 1N 2N/R 4N 1R 1R 2N/R 5R	3N 2N 2N 1N 1R	3N 1R 2N 2N 1N 1R
MIG1	TATAgNGTGGGG	GC boxes-binding factor involved in glucose repression; binding mediated by adjacent AT boxes (yeast)			1R	1R
MNB1a (Dof1)	AAAAAGAaGC AAAAAAGTGA ATACTTTTtC	DNA–binding with One Finger 1; Dof1 (maize); activator; light dependent activator of the C4–type phosphoenolpyruvate carboxylase	1N	1N 1R	 1R 1N	 1R 1N
muEBP-C2	CATGTG	NF-muE3; YEB3; factor binding to Site C2 (muE3) in Immunoglobulin Heavy-Chain Enhancer (mouse)			2N	2N
MYB-like	AAAAGTTATTTAT GGAATTTAGTTAG	MYB transcription factor binding site (consensus sequence for Myb-like protein of Petunia hybrida: NRRAGTTAGTTAS)		1N		1N
myc-CF1	CCATAT CCATGT ATATGG	common factor 1; CF1; transcriptional activator of the c-myc promoter (mouse)			1R 1R	2R 1R 2N
N-Oct-3	ATTWNNNATK MATWAAT ATTWATK MATNNWAAT MATNNNWAAT ATTWNNATK ATTWNNNATK	Brain-2; Brn-2; ranscriptional activator in nervous system and small cell lung cancer (SCLC) cells (human, rat, mouse)	4R 3N 6R 1N 1R	5R 6N 12R 6N 2R 1R	 3N 2R 1N 3N 1R	 3N 2R 3N 4N 1R 2R
NBF	ATGTGAAAT	nonamer binding factor (yeast)			1N	1N
NF-1	GGAAAG CTTGGC TTGGCT	CTF; NF-I; TGGCA–binding protein; (human, mouse)			1R 1N	2R 1N 1R
NF-AT	TGAAAATA ATTTTCCA TTTTCC GGCTCC AGGAAAG GGAAAA TATTTTCA TTTTTCCT TGcTGANNNNNNNGGAAA AT	NF-AT1; NF-ATc2; NFII-a; NF-IL-2E; associates with Fos/Jun upon activation (human, mouse)	1N 1R 1N/R	1N 1R 1N/R	1N 1R 1R	1N 1N/R 1R 1R 1N/R 1R 1R 1R
NIT2	TAGATA TATCAC GTGATA TATCTC	sites recognized by NIT2, activator of nitrogen-regulated genes (*Neurospora crassa*)	1N	1N 1N 1R	1R 3N/R	2R 3N/R

	GAGATA ACGATA TATCGT				1N/R	1N/R 1R 1N
nodule-specific elements	CTCTT AAGAG AAAGAT	root nodule-specific elements; parts of sites recognized by IRF-1, c-Myb & c-Myc	3N 1N	4N 1N 1N	4N	5N
NP-TCII	GGAAANTNT	factor binding to the simian virus 40 enhancer TC-II (NF-kappaB) element, specific for lymphoid cells (human, mouse)				1R
Oct-1 Oct-1, 4	ATATGATAAT TAcTTTGCAT TTAAAATTCa	octamer-binding factor; Oct-1B; oct-B1B; OTF-1; oct-B1A; OBP100; NF-III; NF-A1; alpha-H1; (Ig)NF-A; TRF); transcriptional activator in the pol II and III system; cooperative effects with Sp1, PR , GR, OAP40; down-regulated by IFN-alpha or by TPA (human)	2N 1N	2N 1N 1N		
Opaque-2	CCATATCATC CATGACgTGT	O2; activator; activation of cyPPDK1 and 14 kDa beta-zein; positively autoregulated (maize)			1R 1N	2R 1N
P-motif	ATGGTTGGC AACAACCC GTGGTAGCT	site recognized by maize activator P of flavonoid biosynthetic genes (consensus sequence: ACCWACCNN)			 1N 1N	1N 1N 1N
PEA3	AGGAAA TTTCCT	E1A–F; ETV4; activator; functional cooperation with PEA1/AP-1 in activation and polyoma virus replication; serum-activated, target for several non-nuclear oncogenes (Src, Py-middle T, Ha-Ras, mos, raf; not:fos); down-regulated during RA–induced differentiation of embryonic cell lines (mouse)			1N 1R	2N 2R
Pit-1 Pit-1A	WTATYCAT ATGRATAW TTgATTAATT TTTGCATT ATGAAAA ATGAAtAAGA AtATATTCAT TATTCAT ATgAATGAAT ATGAATA ATGAATG ATGAAAA ATTTTA TAAAAT TCTTAtTCAT ATCAATA TTGCATA gTGAATAATA ATGAATAAgA aTGCATTTTT GTGAATAATa CTGAATT	LSF-1; PUF-I; GHF-2; PUF-1; tissue-specific activator; autoregulation through several promoter and enhancer elements; transcription of the pit-1 gene is triggered by environmental stimuli that enhance intracellular cAMP concentrations; may also be regulated through a potent vitamin D3 responsive element (rat)	 1R 2R 1N 2N 1N	1N 1R 1R 2R 1N 2N 2N 1N/R 1N 1N/R 1N 3R 2N 1R 1N	 1R 1R 1N 3R 2N 1R 1N 1N	 1R 1R 1N/R 1R 1N 5R 2N 2R 2N 1N 1R 1R 1R
PPUR	TCCTCCT	Factor binding to purine-rich sequences (human)			1R	1R
PRDI-BF1	AAGTGAAAgT	Repressor of the IFN-beta gene, virus-inducible (human)			1N	1N
PTF1–beta	ATGGGA TCCCAT	Pancreas cell-specific transcription factor (rat)				1N 1R

PU.1	CTTCTC CTTCCTC TTCCTC	Spi-1; NF-JB; B1; activator or repressor; phosphorylated at Ser-148 by CK II, PU.1 recruits NF-EM5 to bind to DNA resulting in transcriptional activation; PU.1 interferes with the commitment of erythroblast to differentiate; activated by proviral integration of SFFV (anemia- or polycythemia-inducing strains) in 95% of leukemic cell clones	1N 1R 1N	1N 1R 1N	1N 1R 1N	1N 1R 2N
RAP1	TGNNNGGNTG CANCCNNNCA CANCCNNNCA	GRFI; SBF-E; TUF; repressor or activator; activates glycolytic genes and most of ribosomal protein genes, represses all ribosomal protein genes and silent mating loci HML and HMR; involved in telomer and protein stability (yeast)			1R 2N 1N	1R 2N 1N
RAR-α,β,γ	TCACCTNNNNNTGAcCC	retinoic acid receptor alpha; NR1B1; steroid hormone receptor; negative regulator of AP-1 responsive genes (human)		1R		
RITA-1	GACAcGTGTC	Transcription factor spec. for mature seed embryo; probably positively autoregulated (rice)			1N/R	1N/R
RPF1	GGGACTC	binds to an element of the EGF receptor gene that mediates responses to EGF, PMA and cAMP; different from AP-2 (human); common site with Sp1	1R	1R		
RSRFC4	TAWWWWTA	Ubiquitous transcription factor (human, mouse); splice variants: MEF-2, aMEF-2, and RSRFC9	9N/R	12N/R	5N/R	8N/R
SBF-1 like	TAGTTATTAATAAT TGATAGTTAAAAAA	sites recognized by SBF-1, bean nuclear factor closely related to GT-1 (SBF-1 consensus sequence is KWRTNGTTAAWWWN)		1N 1N		
SE	(T)TGTCNC	Silencing element	1N	3N		1N
SEF4	RTTTTTR YAAAAAY CATTTTTGT	soybean embryo factor 4; active in immature seeds	2N 1R	4N 2R	 2R	1N 3R 1N
Sox-5	AACAAT ATTGTT	SRY-related HMG-box gene 5 (mouse)	1N	3N 1R	1N	1N
Sp1	ATTATATA TATATAAT ACcACCCCTC	simian-virus-40–protein-1; superactivated as a multimer effect depends on distance to TATA–box; synergistically cooperates with E2 at BPV virus promoters; highly specific cooperation with NF-kappaB (human); common sites with TBP and TFIID factors	1R	1R 1N	 1N 1N	 1N 1N
SpOtx	TAATCT	A/TBP; homeobox gene; might activate the transcription of the Spec2A gene (sea urchin)			1R	1R
SpRunt-1	TGTGGTC	site recognized by runt-related transcription factor implicated in acute myeloid leukemia pathogensis				1N

SRF	CTATAAATAG CCTTCTTTGg	serum response factor (human); activator and repressor; cooperating with p62TCF, Elk-1, TCF; antagonistic to YY1; induces optimal TFIID conformation for recruitment of the transcription preinitiation complex	1R	1R	1R	1R 1N
SRY	AACAAAT ATTTGTT CTTTGAA	sex-determining region Y gene product; TDF; testis-determining factor (human)	1N 1R	1N 1R		 1R
Ste11 STE12	TTCTTTGTTY AGTTTCAT	induced in response to nitrogen starvation (yeast); positively reg. transcription of genes required for sexual development; recognizes a similar but more stringent DNA consensus sequence (TR-box) as Mat1–Mc	2N	2N	1R	1R
Su(Hw)	YRYTGCATaYYY	activator of gypsy gene; blocks several enhancers in a distance-independent manner; involved in establishing heterochromatin bounderies; protects gene from chromosomal position effects; alters DNA structure - possibly by increasing DNA flexibility (Drosophila)				1N
TII	ATTAAATTTtT	repressor of Krueppel expression; activator of hairy in stripe 7 *(Drosophila)*	1N	1N		
T3R-beta	AAGTAA TTACTT	NR1A2; TR-beta; (human) thyroid hormone receptor-beta; DNA–binding antagonized by AP-1	1N	1N 1R		
TATA box	TATAAATA (proximal to the start codon)	initiation of transcription	1N	1N	1N	1N
TBP	TAAAAAA TTAATTA TAATTAA TTTATATA TTAAATT AAATAAA TAAAAAA TATATATATA,ATATATA TA TATAAA TTTATA TTTATTT TCTTAAA TTTAAGA ACTTATTTAAa TTTaAATAAGT TATAGTA TTTCTATA TATTTAA	TATA–binding protein required for transcription by polymerase I, II, and III; upstream activator effects by TBP-TAF(II) complexes (TFIID); activity is regulated by competitive binding between positively (e. g., TFIIA) and negatively acting factors(e. g., NC2, NC1); competitive TATA–box binding with TMF	1N 3R 2N 1N/R 1N 1N 1N 2N/R 3N 2R	2N 3R 2N 2N/R 1N 3N 1N 2N/R 3N 2R 2R 2R 1R	 3N 4N 1R 1N 1R 1N 1N 1R 1N	 3N 5N/R 6N 2R 1N 1R 1N 1N 1R 1N
TCA–like	TCATACTT TCACTCTC ATATCTTCTT CCACCTTCTT	sequences responding to salicylic acid; original TCA motif: TCATCTTCTT	1N 1N 1N	2N 1N 1N	1N	2N 1N
TCF-1 TCF-1alpha	AATAAAGT CTCCTTTGtTC CCTTTG	LEF-1; potent activator when bound in the right context e.g. with an adjacently binding TCF-2; spec. for T cells (human, mouse)	 1R 1N	 1R 1N	1N 1R 1N	1N 1R 1N
TFIID	TTTGAA AATAAATA TATTTATT TTCAAA	ubiquitous transcription factor complex of TBP and TAFs; TATA–box-binding; can be competed by En	1R	1R 2R 2N 1N	 1N	1R 2N

TGAC motif	TGAC	implicated in tissue-spec. or auxin, SA and cAMP-inducible expression			1N	3N
TMF	TATAAAT ATTTATA	Human TATA element modulatory factor; binds to the TATA box of HIV-1 and inhibits activation by TBP	2N 1R	2N 2R	2N	3N
Twi	CAAATG	E-box; nuclear factors binding site			1N	2N
USF	GACANNTGTC CATGTG CACGAG	upstream stimulatory factor; USF43; pf51; MRF; ubiquitous transcription activator; cooperative interaction with TFII-I and TFIID; stimulated by C/EBPalpha to transactivate the human C/EBPalpha gene (human, yeast); common site with HES-1, inhibitor of neural differentiation in CNS (mouse)			1N/R 2R	1N/R 2R 1N
W-box	TTTGACC	recognized by WRKY proteins				2N
XPF-1	TCTCAT	transcriptional activation of exocrine pancreas-specific gene expression (dog)	1R	1R		
Zeste	TGAGTC CACTCC TGAGTG CGAGTG	transcription activator; cooperative binding to multiple sites required for DNA–binding; not essential for viability *(Drosophila)*	1N	1N	1N	2N 1R 1N/R
Zta	TTGCTCA TTGCTAA TGAGCCA TGTGTCA	binds DNA as a homodimer synergizes with c-Myb & R factor; stabilizes TBP-binding & inhibits trans-activation by p53 through direct interactions (*Epstein-Barr virus)*	1N/R	1N/R 1N	1N/R 2R	1N/R 1N 2R
unknown motif	TCATGNA	in 3 direct repeats				3N

N - normal (forward) orientation; R - reverse orientation;
pink – sites unique to *LlYpr-10.2b* promoter;
green – sites unique to *LlYpr-10.2f* promoter;
red - sites unique to long promoter fragments (both);
orange - sites unique to long fragment of *LlYpr-10.2b* promoter;
blue - sites unique for long fragment of *LlYpr-10.2f* promoter.

Summary of search results:
2b short – sites recognized by **60** factors
2b long – sites recognized by **72** factors
2f short – sites recognized by **70** factors
2f long – sites recognized by **98** factors