Supplement. Transcriptional factors (TF), protein name and their description or function.

TF	Protein name	TF description/function
ARID3A	AT rich interactive domain 3A (BRIGHT-like)	This gene encodes a member of the ARID (AT-rich interaction domain) family of DNA binding proteins.
ATF4	Activating Transcription Factor 4	Transcriptional activator. Binds the cAMP response element (CRE) (consensus: 5-GTGACGT[AC][AG]-3), a sequence present in many viral and cellular promoters.
CTCF	CCCTC-Binding Factor	Chromatin binding factor that binds to DNA sequence specific sites. Involved in transcriptional regulation by binding to chromatin insulators and preventing interaction between promoter and nearby enhancers and silencers. The protein can bind a histone acetyltransferase (HAT)-containing complex and function as a transcriptional activator or bind a histone deacetylase (HDAC)-containing complex and function as a transcriptional repressor.
E2F1-6	E2F transcription factors 1-6	The protein encoded by this gene is a member of the E2F family of transcription factors. The E2F family plays a crucial role in the control of cell cycle and action of tumor suppressor proteins and is also a target of the transforming proteins of small DNA tumor viruses. The E2F proteins contain several evolutionally conserved domains found in most members of the family. These domains include a DNA binding domain, a dimerization domain which determines interaction with the differentiation regulated transcription factor proteins (DP), a transactivation domain enriched in acidic amino acids, and a tumor suppressor protein association domain which is embedded within the transactivation domain.
EBF1	Transcription factor COE1	EBF1 has been shown to interact with ZNF423 and CREB binding proteins.
EGR1	Early growth response 1	The protein encoded by this gene belongs to the EGR family of C2H2-type zinc-finger proteins. It is a nuclear protein and functions as a transcriptional regulator. The products of target genes it activates are required for differentitation and mitogenesis.
ELK1	ELK1, member of ETS oncogene family	This gene is a member of the Ets family of transcription factors and of the ternary complex factor (TCF) subfamily. The protein encoded by this gene is a nuclear target for the ras-raf-MAPK signaling cascade.
ELK4	ELK4, ETS-domain protein (SRF accessory protein 1)	This gene is a member of the Ets family of transcription factors and of the ternary complex factor (TCF) subfamily. Proteins of the TCF subfamily form a ternary complex by binding to the the serum response factor and the serum reponse element in the promoter of the c-fos proto-oncogene.
ETS1	Protein C-ets-1	The protein encoded by this gene belongs to the ETS family of transcription factors and has been shown to interact with TTRAP, UBE2I and Death associated protein.
FEV	ETS oncogene family	It functions as a transcriptional repressor.
FLI1	Fli-1 Proto-Oncogene, ETS Transcription Factor	This gene encodes a transcription factor containing an ETS DNA-binding domain.
FOXA1	Forkhead box A1	Transcription factor that is involved in embryonic development, establishment of tissue-specific gene expression and regulation of gene expression in differentiated tissues. Is thought to act as a 'pioneer' factor opening the compacted chromatin for other proteins through interactions with nucleosomal core histones and thereby replacing linker histones at target enhancer and/or promoter sites. Involved in the development of multiple endoderm-derived organ systems such as liver, pancreas, lung and prostate. Modulates the transcriptional activity of nuclear hormone receptors.

FOXC1	Forkhead box C1	An important regulator of cell viability and resistance to oxidative stress in the eye.
FOXD1	Forkhead box D1	Transcription factor required for formation of positional identity in the developing retina, regionalization of the optic chiasm and morphogenesis of the kidney.
FOXH1	Forkhead box H1	Transcriptional activator
FOXI1	Forkhead box I1	Transcriptional activator required for the development of normal hearing, sense of balance and kidney function.
FOXL1	Forkhead box L1	Transcription factor required for proper proliferation and differentiation in the gastrointestinal epithelium. Target gene of the hedgehog (Hh) signaling pathway.
FOXL2	Forkhead box L2	Transcriptional regulator. Critical factor essential for ovary differentiation and maintenance, and repression of the genetic program for somatic testis determination.
FOXO1	Forkhead Box O1	Transcription factor that is the main target of insulin signaling and regulates metabolic homeostasis in response to oxidative stress.
FOXP1	Forkhead box P1	This gene belongs to subfamily P of the forkhead box (FOX) transcription factor family. Forkhead box transcription factors play important roles in the regulation of tissue- and cell type-specific gene transcription during both development and adulthood. Transcriptional repressor. It plays an important role in the specification and differentiation of lung epithelium.
GABPA	GA Binding Protein Transcription Factor Alpha Subunit	This gene encodes one of three GA-binding protein transcription factor subunits which functions as a DNA-binding subunit. Since this subunit shares identity with a subunit encoding the nuclear respiratory factor 2 gene, it is likely involved in activation of cytochrome oxidase expression and nuclear control of mitochondrial function.
GMEB2	Glucocorticoid Modulatory Element Binding Protein 2	Modulation of transactivation by the glucocorticoid receptor bound to glucocorticoid response elements.
GR	Glucocorticoid receptor Nuclear Receptor Subfamily 3 Group C Member 1	This gene encodes glucocorticoid receptor, which can function both as a transcription factor that binds to glucocorticoid response elements in the promoters of glucocorticoid responsive genes to activate their transcription, and as a regulator of other transcription factors.
HNF1A	Hepatocyte nuclear factor 1, alpha	Transcriptional activator that regulates the tissue specific expression of multiple genes, especially in pancreatic islet cells and in liver.
HNF4A	Hepatocyte nuclear factor 4, alpha	The protein encoded by this gene is a nuclear transcription factor which binds DNA as a homodimer. The encoded protein controls the expression of several genes, including hepatocyte nuclear factor 1 alpha, a transcription factor which regulates the expression of several hepatic genes. This gene may play a role in development of the liver, kidney, and intestines
HNF4G	Hepatocyte nuclear factor 4, gamma	Steroid hormone receptor activity and sequence-specific DNA binding transcription factor activity. An important paralog of this gene is RXRA.
IRF1,2	Interferon regulatory factor	Members of the interferon regulatory transcription factor (IRF) family that contain a conserved N-terminal region of about 120 amino acids, which folds into a structure that binds specifically to the interferon consensus sequence (ICS).
KLF4	Krueppel-like factor 4	Transcription factor that can act both as activator and as repressor.

		Regulates the expression of key transcription factors during embryonic development.
MAX	MYC Associated Factor X	Transcription regulator. Forms a sequence-specific DNA-binding protein complex with MYC or MAD which recognizes the core sequence 5-CAC[GA]TG-3.
MYC	V-Myc Avian Myelocytomatosis Viral Oncogene Homolog	The protein encoded by this gene is a multifunctional, nuclear phosphoprotein that plays a role in cell cycle progression, apoptosis and cellular transformation.
MYC::MAX	v-*myc* avian myelocytomatosis viral *MYC* associated factor X	The protein encoded by this gene is a multifunctional, nuclear phosphoprotein that plays a role in cell cycle progression, apoptosis and cellular transformation. It functions as a transcription factor that regulates transcription of specific target genes. The MYC:MAX complex is a transcriptional activator.
NFE2	Nuclear Factor, Erythroid 2	Component of the NF-E2 complex essential for regulating erythroid and megakaryocytic maturation and differentiation.
NFKB1	Nuclear factor of kappa light polypeptide oncogene homolog gene enhancer in B-cells 1	NF-kappa-B is a pleiotropic transcription factor present in almost all cell types and is the endpoint of a series of signal transduction events that are initiated by a vast array of stimuli related to many biological processes such as inflammation, immunity, differentiation, cell growth, tumorigenesis and apoptosis.
NKX2-1	NK2 Homeobox 1	Transcription factor that binds and activates the promoter of thyroid specific genes such as thyroglobulin, thyroperoxidase, and thyrotropin receptor.
NKX2-3	NK2 Homeobox 3	This gene encodes a homeodomain-containing transcription factor. The encoded protein is a member of the NKX family of homeodomain transcription factors.
NKX3-2	Natural killer 3 homeobox 2	This gene encodes a member of the NK family of homeobox-containing proteins. Transcriptional repressor that acts as a negative regulator of chondrocyte maturation.
NRF1	Nuclear respiratory factor 1	This gene encodes a protein that homodimerizes and functions as a transcription factor which activates the expression of some key metabolic genes regulating cellular growth and nuclear genes required for respiration, heme biosynthesis, and mitochondrial DNA transcription and replication.
PAX1	Paired box gene 1	This protein is a transcriptional activator. It may play a role in the formation of segmented structures of the embryo.
PAX5	Paired box 5 gene	The central feature of this transcription factor gene family is the conserved DNA-binding paired box domain. Alternative splicing of this gene results in multiple transcript variants.
POU2F2	POU class 2 homeobox 2	The protein encoded by this gene is a homeobox-containing transcription factor of the POU domain family. The encoded protein binds the octamer sequence 5'-ATTTGCAT-3', a common transcription factor binding site in immunoglobulin gene promoters.
POU5F1	POU Class 5 Homeobox 1	Transcription factor that binds to the octamer motif (5-ATTTGCAT-3). Forms a trimeric complex with SOX2 on DNA and controls the expression of a number of genes involved in embryonic development such as YES1, FGF4, UTF1 and ZFP206.
PRDM1	PR domain containing 1, with ZNF domain	This gene encodes a protein that acts as a repressor of beta-interferon gene expression.
RAD21	RAD21 Cohesin Complex Component	Cleavable component of the cohesin complex, involved in chromosome cohesion during cell cycle, in DNA repair, and in apoptosis.
RORA_1 & 2	RAR-related orphan receptor A	Orphan nuclear receptor. Binds DNA as a monomer to hormone response elements (HRE) containing a single

		core motif half-site preceded by a short A-T-rich sequence. It has been shown to aid in the transcriptional regulation of some genes involved in circadian rhythm. Regulates a number of genes involved in lipid metabolism, in cerebellum and photoreceptor development and and skeletal muscle development.
RXRα	Retinoid X Receptor Alpha	Receptor for retinoic acid. Retinoic acid receptors bind as heterodimers to their target response elements in response to their ligands, all-trans or 9-cis retinoic acid, and regulate gene expression in various biological processes.
SMC3	Structural Maintenance Of Chromosomes 3	This gene belongs to the SMC3 subfamily of SMC proteins. The encoded protein occurs in certain cell types as either an intracellular, nuclear protein or a secreted protein. Central component of cohesin, a complex required for chromosome cohesion during the cell cycle.
SOX1	SRY (sex determining region Y)-box 1	This intronless gene encodes a member of the SRY-related HMG-box (SOX) family of transcription factors involved in the regulation of embryonic development and in the determination of cell fate.
SOX2	SRY (sex determining region Y)-box 2	Transcription factor that forms a trimeric complex with OCT4 on DNA and controls the expression of a number of genes involved in embryonic development such as YES1, FGF4, UTF1 and ZFP206 (By similarity).
SP1	Specificity Protein 1	Can activate or repress transcription in response to physiological and pathological stimuli. Regulates the expression of a large number of genes involved in a variety of processes such as cell growth, apoptosis, differentiation and immune responses.
TBP	TATA-Box Binding Protein	General transcription factor that functions at the core of the DNA-binding multiprotein factor TFIID. Binding of TFIID to the TATA box is the initial transcriptional step of the pre-initiation complex (PIC), playing a role in the activation of eukaryotic genes transcribed by RNA polymerase II.
TCFCP211	Transcription factor CP2-like 1	Transcriptional suppressor. May suppress UBP1-mediated transcriptional activation. Modulates the placental expression of CYP11A1.
YY1	YY1 transcription factor	YY1 is a ubiquitously distributed transcription factor belonging to the GLI-Kruppel class of zinc finger proteins. The protein is involved in repressing and activating a diverse number of promoters. YY1 may direct histone deacetylases and histone acetyltransferases to a promoter in order to activate or repress the promoter, thus implicating histone modification in the function of YY1.
ZFX	Zinc finger X-chromosomal protein	A member of the krueppel C2H2-type zinc-finger protein family and probable transcriptional activator.
ZNF143	Zinc finger protein 143	Transcriptional activator. Activates the gene for selenocysteine tRNA (tRNAsec). interaction with CHD8. Binds to the SPH motif of small nuclear RNA (snRNA) gene promoters. Participates in efficient U6 RNA polymerase III transcription via its interaction with CHD8.