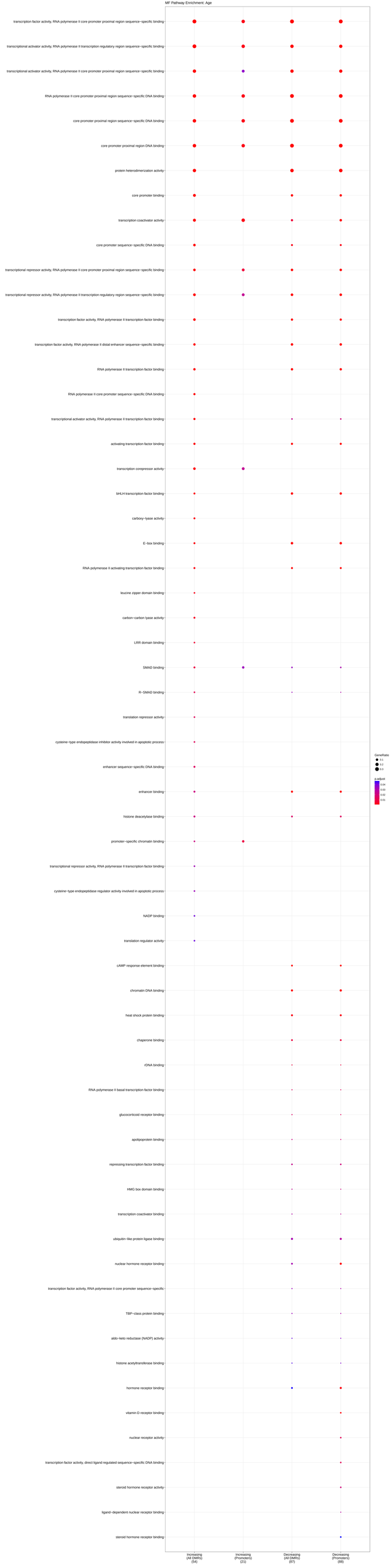
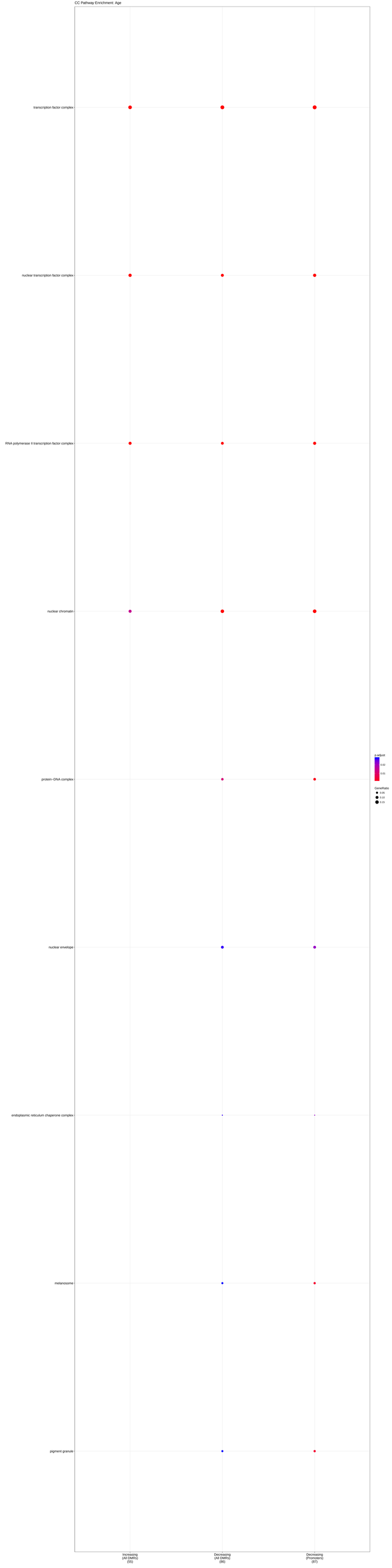
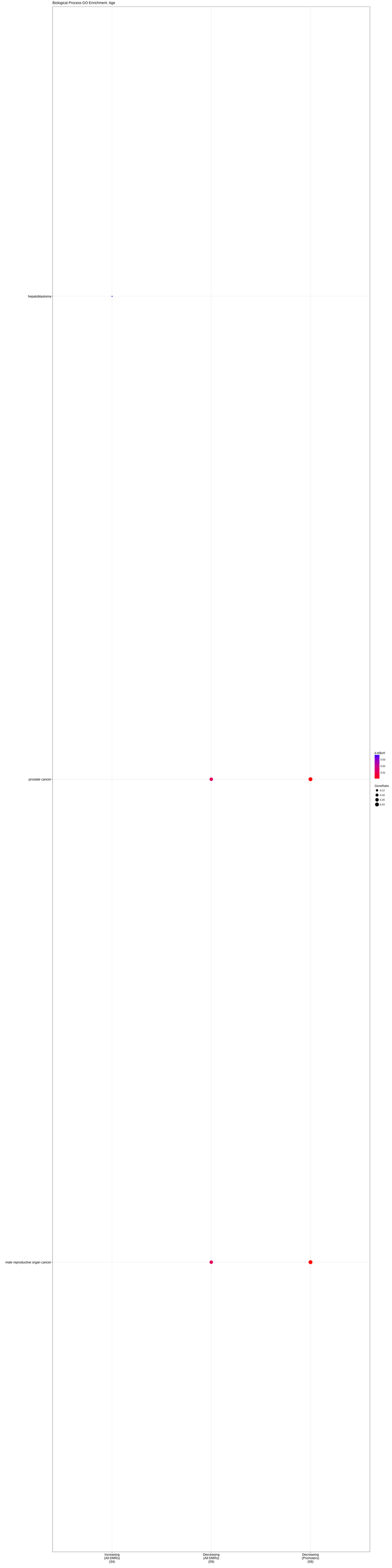
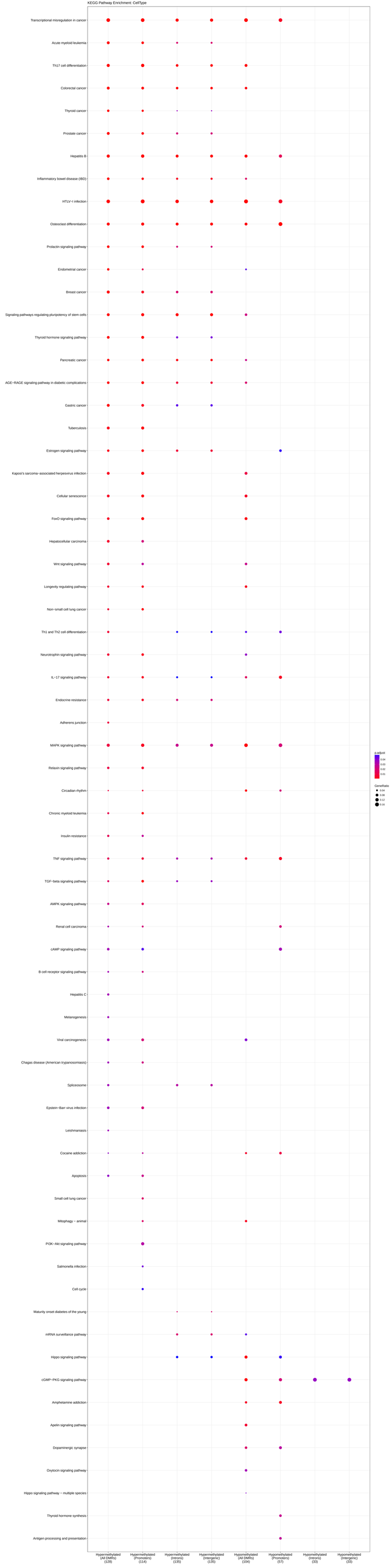

KEGG Pathway Enrichment: Age
IL−17 signaling pathway
HTLV−I infection
Non−alcoholic fatty liver disease (NAFLD)
TNF signaling pathway
Osteoclast differentiation
Mitophagy − animal
Acute myeloid leukemia
Amphetamine addiction
Hepatitis B
Colorectal cancer
Circadian rhythm
Transcriptional misregulation in cancer
Protein processing in endoplasmic reticulum
Thyroid hormone signaling pathway
Prion diseases
Antigen processing and presentation
Chronic myeloid leukemia
Signaling pathways regulating pluripotency of stem cells
Breast cancer
MAPK signaling pathway
Endocrine resistance
Estrogen signaling pathway
Amyotrophic lateral sclerosis (ALS)
Tuberculosis
Thyroid cancer
Gastric cancer
Small cell lung cancer
Increasing (All DMRs) (32)
Decreasing (All DMRs) (50)
Decreasing (Promoters) (53)
GeneRatio
0.10
0.15
0.20
p.adjust
0.04
0.03
0.02
0.01


MF Pathway Enrichment: Age
transcription factor activity, RNA polymerase II core promoter proximal region sequence−specific binding
transcriptional activator activity, RNA polymerase II transcription regulatory region sequence−specific binding
transcriptional activator activity, RNA polymerase II core promoter proximal region sequence−specific binding
RNA polymerase II core promoter proximal region sequence−specific DNA binding
core promoter proximal region sequence−specific DNA binding
core promoter proximal region DNA binding
protein heterodimerization activity
core promoter binding
transcription coactivator activity
core promoter sequence−specific DNA binding
transcriptional repressor activity, RNA polymerase II core promoter proximal region sequence−specific binding
transcriptional repressor activity, RNA polymerase II transcription regulatory region sequence−specific binding
transcription factor activity, RNA polymerase II transcription factor binding
transcription factor activity, RNA polymerase II distal enhancer sequence−specific binding
RNA polymerase II transcription factor binding
RNA polymerase II core promoter sequence−specific DNA binding
transcriptional activator activity, RNA polymerase II transcription factor binding
activating transcription factor binding
transcription corepressor activity
bHLH transcription factor binding
carboxy−lyase activity
E−box binding
RNA polymerase II activating transcription factor binding
leucine zipper domain binding
carbon−carbon lyase activity
LRR domain binding
SMAD binding
R−SMAD binding
translation repressor activity
cysteine−type endopeptidase inhibitor activity involved in apoptotic process
enhancer sequence−specific DNA binding
enhancer binding
histone deacetylase binding
promoter−specific chromatin binding
transcriptional repressor activity, RNA polymerase II transcription factor binding
cysteine−type endopeptidase regulator activity involved in apoptotic process
NADP binding
translation regulator activity
cAMP response element binding
chromatin DNA binding
heat shock protein binding
chaperone binding
rDNA binding
RNA polymerase II basal transcription factor binding
glucocorticoid receptor binding
apolipoprotein binding
repressing transcription factor binding
HMG box domain binding
transcription coactivator binding
ubiquitin−like protein ligase binding
nuclear hormone receptor binding
transcription factor activity, RNA polymerase II core promoter sequence−specific
TBP−class protein binding
aldo−keto reductase (NADP) activity
histone acetyltransferase binding
hormone receptor binding
vitamin D receptor binding
nuclear receptor activity
transcription factor activity, direct ligand regulated sequence−specific DNA binding
steroid hormone receptor activity
ligand−dependent nuclear receptor binding
steroid hormone receptor binding
Increasing (All DMRs) (54)
Increasing (Promoters) (21)
Decreasing (All DMRs) (87)
Decreasing (Promoters) (89)
GeneRatio
0.1
0.2
0.3
p.adjust
0.04
0.03
0.02
0.01

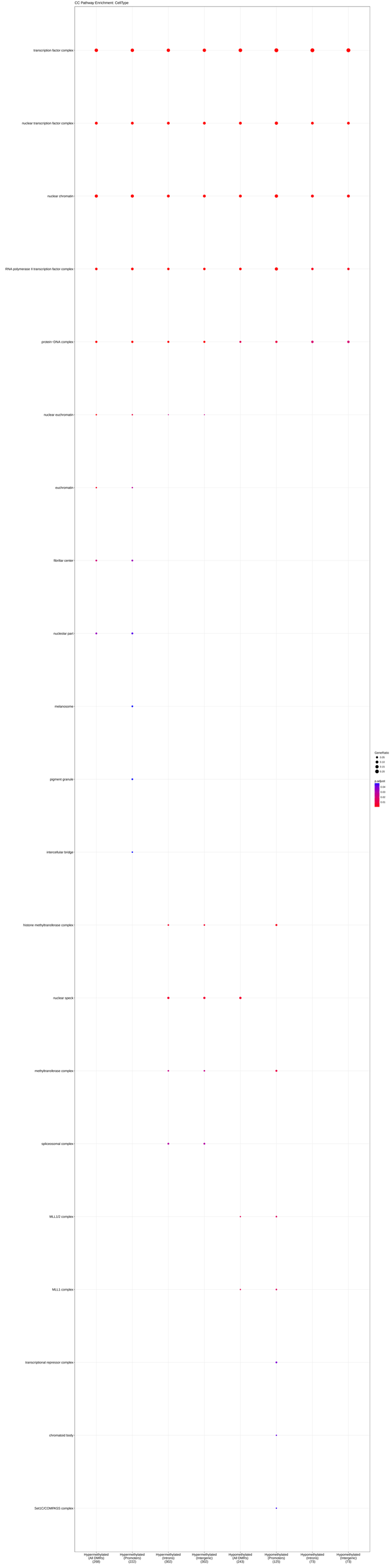

CC Pathway Enrichment: Age
transcription factor complex
nuclear transcription factor complex
RNA polymerase II transcription factor complex
nuclear chromatin
protein−DNA complex
nuclear envelope
endoplasmic reticulum chaperone complex
melanosome
pigment granule
Increasing
(All DMRs)
(55)
Decreasing
(All DMRs)
(86)
Decreasing
(Promoters)
(87)
p.adjust
0.02
0.01
GeneRatio
0.05
0.10
0.15


Biological Process GO Enrichment: Age
myeloid leukocyte differentiation
cellular response to extracellular stimulus
regulation of myeloid leukocyte differentiation
cellular response to external stimulus
positive regulation of neuron death
positive regulation of transcription from RNA polymerase II promoter in response to endoplasmic reticulum stress
positive regulation of ossification
cellular response to metal ion
response to extracellular stimulus
regulation of leukocyte differentiation
positive regulation of neuron apoptotic process
leukocyte differentiation
cellular response to inorganic substance
response to endoplasmic reticulum stress
cellular response to nutrient levels
myeloid cell differentiation
glucose metabolic process
intrinsic apoptotic signaling pathway in response to endoplasmic reticulum stress
positive regulation of transcription from RNA polymerase II promoter in response to stress
response to lipopolysaccharide
liver development
skeletal muscle cell differentiation
carbohydrate homeostasis
glucose homeostasis
cellular response to starvation
hepaticobiliary system development
response to metal ion
response to molecule of bacterial origin
positive regulation of transcription from RNA polymerase II promoter involved in cellular response to chemical stimulus
hexose metabolic process
regulation of myeloid cell differentiation
gluconeogenesis
skeletal muscle tissue development
hexose biosynthetic process
monocyte differentiation
pri-miRNA transcription from RNA polymerase II promoter
mononuclear cell differentiation
skeletal muscle organ development
monosaccharide biosynthetic process
response to starvation
cellular response to glucose starvation
monosaccharide metabolic process
response to cAMP
regulation of neuron death
anion homeostasis
regulation of ossification
dicarboxylic acid metabolic process
response to drug
ER−nucleus signaling pathway
response to light stimulus
circadian rhythm
regulation of neuron apoptotic process
response to nutrient levels
negative regulation of myeloid leukocyte differentiation
response to gravity
regulation of transcription from RNA polymerase II promoter in response to stress
response to radiation
rhythmic process
neuron death
lipid homeostasis
regulation of hemopoiesis
fat cell differentiation
regulation of DNA−templated transcription in response to stress
regulation of fat cell differentiation
oxaloacetate metabolic process
transcription from RNA polymerase III promoter
multi−multicellular organism process
neuron apoptotic process
circadian regulation of gene expression
fatty acid homeostasis
eyelid development in camera−type eye
endoplasmic reticulum unfolded protein response
cellular response to calcium ion
response to organophosphorus
positive regulation of fat cell differentiation
positive regulation of leukocyte differentiation
dicarboxylic acid biosynthetic process
positive regulation of osteoblast differentiation
cellular response to unfolded protein
cellular response to arsenic−containing substance
positive regulation of exosomal secretion
regulation of osteoclast differentiation
striated muscle tissue development
regulation of exosomal secretion
response to purine−containing compound
response to glucocorticoid
morphogenesis of embryonic epithelium
parturition
negative regulation of myotube differentiation
hepatocyte proliferation
epithelial cell proliferation involved in liver morphogenesis
muscle tissue development
regulation of monocyte differentiation
response to corticosterone
liver morphogenesis
muscle organ development
cellular response to topologically incorrect protein
kidney development
response to steroid hormone
response to muscle stretch
exosomal secretion
regulation of protein catabolic process
response to corticosteroid
extracellular exosome biogenesis
extracellular vesicle biogenesis
positive regulation of pri−miRNA transcription from RNA polymerase II promoter
renal system development
PERK−mediated unfolded protein response
positive regulation of hemopoiesis
cellular response to oxidative stress
positive regulation of epithelial cell proliferation
aspartate family amino acid biosynthetic process
retina layer formation
positive regulation of interleukin−4 production
negative regulation of translational initiation
response to unfolded protein
response to oxidative stress
response to lithium ion
glandular epithelial cell development
osteoclast differentiation
negative regulation of myeloid cell differentiation
negative regulation of neuron death
negative regulation of leukocyte differentiation
in utero embryonic development
regulation of transcription from RNA polymerase III promoter
regulation of interleukin−4 production
positive regulation of DNA−templated transcription, initiation
urogenital system development
primary neural tube formation
response to topologically incorrect protein
carbohydrate biosynthetic process
response to mineralocorticoid
response to arsenic−containing substance
regulation of pri−miRNA transcription from RNA polymerase II promoter
granulocyte differentiation
negative regulation of exocytosis
neural tube formation
cellular response to cadmium ion
positive regulation of viral process
response to mechanical stimulus
eye development
gland development
regulation of DNA−templated transcription, initiation
DNA−templated transcription, initiation
endocrine system development
mammary gland epithelial cell proliferation
epithelial cell proliferation
mammary gland epithelium development
regulation of DNA binding transcription factor activity
DNA−templated transcriptional preinitiation complex assembly
regulation of RNA polymerase II transcriptional preinitiation complex assembly
mammary gland development
reproductive structure development
reproductive system development
regulation of fibroblast proliferation
fibroblast proliferation
negative regulation of phosphorylation
type B pancreatic cell development
columnar/cuboidal epithelial cell development
ovarian follicle development
lymphocyte differentiation
negative regulation of protein phosphorylation
cell fate commitment
type B pancreatic cell differentiation
response to axon injury
transcription initiation from RNA polymerase II promoter
enteroendocrine cell differentiation
regulation of transcription initiation from RNA polymerase II promoter
positive regulation of cysteine−type endopeptidase activity involved in apoptotic process
steroid hormone mediated signaling pathway
protein−DNA complex subunit organization
positive regulation of cysteine−type endopeptidase activity
T cell activation
RNA polymerase II transcriptional preinitiation complex assembly
myeloid cell homeostasis
regulation of intracellular steroid hormone receptor signaling pathway
response to hydrogen peroxide
intracellular steroid hormone receptor signaling pathway
negative regulation of DNA binding transcription factor activity
regulation of protein complex assembly
activation of cysteine−type endopeptidase activity involved in apoptotic process
gonad development
extrinsic apoptotic signaling pathway via death domain receptors
placenta development
ovulation cycle process
development of primary sexual characteristics
positive regulation of cell cycle arrest
hormone−mediated signaling pathway
homeostasis of number of cells
positive regulation of endopeptidase activity
ATF6−mediated unfolded protein response
negative regulation of fibrinolysis
vagina development
embryonic organ development
protein−DNA complex assembly
positive regulation of RNA polymerase II transcriptional preinitiation complex assembly
positive regulation of DNA binding transcription factor activity
female gonad development
endocrine pancreas development
mammary gland morphogenesis
cell cycle arrest
regulation of circadian rhythm
intrinsic apoptotic signaling pathway in response to oxidative stress
mRNA cleavage involved in mRNA processing
regulation of IRE1−mediated unfolded protein response
glandular epithelial cell differentiation
negative regulation of fat cell differentiation
development of primary female sexual characteristics
positive regulation of peptidase activity
modification of morphology or physiology of other organism involved in symbiotic interaction
cellular response to steroid hormone stimulus
positive regulation of apoptotic signaling pathway
regulation of histone phosphorylation
cellular response to lithium ion
activation of cysteine−type endopeptidase activity involved in apoptotic signaling pathway
columnar/cuboidal epithelial cell differentiation
ovulation cycle
positive regulation of myeloid leukocyte differentiation
digestive tract morphogenesis
regulation of lipid metabolic process
protein folding in endoplasmic reticulum
regulation of fibrinolysis
sex differentiation
positive regulation of muscle cell differentiation
regulation of striated muscle cell differentiation
alternative mRNA splicing, via spliceosome
regulation of osteoblast differentiation
regulation of cell cycle arrest
ossification
positive regulation of cell cycle
positive regulation of nuclease activity
glucocorticoid receptor signaling pathway
response to gamma radiation
positive regulation of fibroblast proliferation
female sex differentiation
B cell differentiation
release of cytochrome c from mitochondria
interleukin−12−mediated signaling pathway
response to calcium ion
cellular response to interleukin−12
positive regulation of intrinsic apoptotic signaling pathway
epithelial cell development
gland morphogenesis
response to calcium ion
regulation of muscle cell differentiation
intracellular receptor signaling pathway
response to interleukin−12
osteoblast development
corticosteroid receptor signaling pathway
mammary gland epithelial cell differentiation
positive regulation of transforming growth factor beta production
intrinsic apoptotic signaling pathway
positive regulation of proteolysis
aging
female gentalia development
mammary gland alveolus development
mammary gland lobule development
positive regulation of cysteine−type endopeptidase activity involved in apoptotic signaling pathway
osteoclast differentiation
regulation of cysteine−type endopeptidase activity involved in apoptotic process
regulation of myotube differentiation
positive regulation of epithelial cell proliferation
entrainment of circadian clock by photoperiod
regulation of histone modification
regulation of mitochondrial membrane potential
modification of morphology or physiology of other organism
modulation by virus of host morphology or physiology
response to acid chemical
prostate glandular acinus development
modification by symbiont of host morphology or physiology
branching involved in prostate gland morphogenesis
response to amino acid
interaction with host
muscle cell differentiation
signal transduction involved in regulation of gene expression
muscle cell cellular homeostasis
positive regulation of transcription initiation from RNA polymerase II promoter
Increasing (All DMRs) (56)
Decreasing (All DMRs) (85)
Decreasing (Promoters) (87)
p.adjust
0.04
0.03
0.02
0.01
GeneRatio
0.04
0.06
0.08
0.10


Biological Process GO Enrichment: Age
hepatoblastoma
prostate cancer
male reproductive organ cancer
p.adjust
0.03
0.02
0.01
GeneRatio
0.12
0.16
0.20
0.24
Increasing
(All DMRs)
(34)
Decreasing
(All DMRs)
(59)
Decreasing
(Promoters)
(58)


KEGG Pathway Enrichment: CellType
Transcriptional misregulation in cancer
Acute myeloid leukemia
Th17 cell differentiation
Colorectal cancer
Thyroid cancer
Prostate cancer
Hepatitis B
Inflammatory bowel disease (IBD)
HTLV−I infection
Osteoclast differentiation
Prolactin signaling pathway
Endometrial cancer
Breast cancer
Signaling pathways regulating pluripotency of stem cells
Thyroid hormone signaling pathway
Pancreatic cancer
AGE−RAGE signaling pathway in diabetic complications
Gastric cancer
Tuberculosis
Estrogen signaling pathway
Kaposi's sarcoma−associated herpesvirus infection
Cellular senescence
FoxO signaling pathway
Hepatocellular carcinoma
Wnt signaling pathway
Longevity regulating pathway
Non−small cell lung cancer
Th1 and Th2 cell differentiation
Neurotrophin signaling pathway
IL−17 signaling pathway
Endocrine resistance
Adherens junction
MAPK signaling pathway
Relaxin signaling pathway
Circadian rhythm
Chronic myeloid leukemia
Insulin resistance
TNF signaling pathway
TGF−beta signaling pathway
AMPK signaling pathway
Renal cell carcinoma
cAMP signaling pathway
B cell receptor signaling pathway
Hepatitis C
Melanogenesis
Viral carcinogenesis
Chagas disease (American trypanosomiasis)
Spliceosome
Epstein−Barr virus infection
Leishmaniasis
Cocaine addiction
Apoptosis
Small cell lung cancer
Mitophagy − animal
PI3K−Akt signaling pathway
Salmonella infection
Cell cycle
Maturity−onset diabetes of the young
mRNA surveillance pathway
Hippo signaling pathway
cGMP−PKG signaling pathway
Amphetamine addiction
Apelin signaling pathway
Dopaminergic synapse
Oxytocin signaling pathway
Hippo signaling pathway − multiple species
Thyroid hormone synthesis
Antigen processing and presentation
Hypermethylated (All DMRs) (128)
Hypermethylated (Promoters) (114)
Hypermethylated (Introns) (135)
Hypermethylated (Intergenic) (135)
Hypomethylated (All DMRs) (104)
Hypomethylated (Promoters) (57)
Hypomethylated (Introns) (33)
Hypomethylated (Intergenic) (33)
p.adjust
0.04
0.03
0.02
0.01
GeneRatio
0.04
0.08
0.12
0.16


MF Pathway Enrichment: CellType
transcriptional activator activity, RNA polymerase II transcription regulatory region sequence−specific binding
transcription factor activity, RNA polymerase II core promoter proximal region sequence−specific binding
core promoter proximal region sequence−specific DNA binding
core promoter proximal region DNA binding
RNA polymerase II core promoter proximal region sequence−specific DNA binding
transcriptional activator activity, RNA polymerase II core promoter proximal region sequence−specific binding
core promoter binding
transcription factor activity, RNA polymerase II distal enhancer sequence−specific binding
nuclear receptor activity
transcription factor activity, direct ligand regulated sequence−specific DNA binding
steroid hormone receptor activity
enhancer binding
core promoter sequence−specific DNA binding
protein heterodimerization activity
transcriptional repressor activity, RNA polymerase II transcription regulatory region sequence−specific binding
transcriptional repressor activity, RNA polymerase II core promoter proximal region sequence−specific binding
enhancer sequence−specific DNA binding
RNA polymerase II transcription factor binding
RNA polymerase II core promoter sequence−specific DNA binding
transcription coactivator activity
nuclear hormone receptor binding
RNA polymerase II distal enhancer sequence−specific DNA binding
hormone receptor binding
E−box binding
transcriptional activator activity, RNA polymerase II transcription factor binding
transcription cofactor binding
bHLH transcription factor binding
beta−catenin binding
steroid hormone receptor binding
transcription factor activity, RNA polymerase II transcription factor binding
activating transcription factor binding
chromatin DNA binding
transcriptional activator activity, RNA polymerase II distal enhancer sequence−specific binding
histone deacetylase binding
RNA polymerase II activating transcription factor binding
transcription coactivator binding
steroid binding
histone acetyltransferase binding
retinoid X receptor binding
repressing transcription factor binding
HMG box domain binding
R−SMAD binding
co−SMAD binding
retinoic acid receptor binding
glucocorticoid receptor binding
cAMP response element binding
transcription corepressor activity
androgen receptor binding
promoter−specific chromatin binding
SMAD binding
monocarboxylic acid binding
transcription factor activity, RNA polymerase II core promoter sequence−specific
phosphatase binding
transcription factor activity, transcription factor recruiting
ubiquitin−like protein ligase binding
single−stranded RNA binding
mitogen−activated protein kinase kinase kinase binding
RNA polymerase II transcription coactivator activity
transforming growth factor beta receptor, cytoplasmic mediator activity
protein phosphatase binding
ubiquitin protein ligase binding
rDNA binding
RNA polymerase II transcription cofactor activity
poly(U) RNA binding
nucleosome binding
transcriptional repressor activity, RNA polymerase II transcription factor binding
pre−mRNA binding
intronic transcription regulatory region sequence−specific DNA binding
intronic transcription regulatory region DNA binding
single−stranded DNA binding
p53 binding
heat shock protein binding
protein N−terminus binding
RNA polymerase II transcription corepressor activity
WW domain binding
Hypermethylated (All DMRs) (270)
Hypermethylated (Promoters) (223)
Hypermethylated (Introns) (302)
Hypermethylated (Intergenic) (302)
Hypomethylated (All DMRs) (241)
Hypomethylated (Promoters) (121)
Hypomethylated (Introns) (72)
Hypomethylated (Intergenic) (72)
p.adjust
0.04
0.03
0.02
0.01
GeneRatio
0.2
0.1
0.0

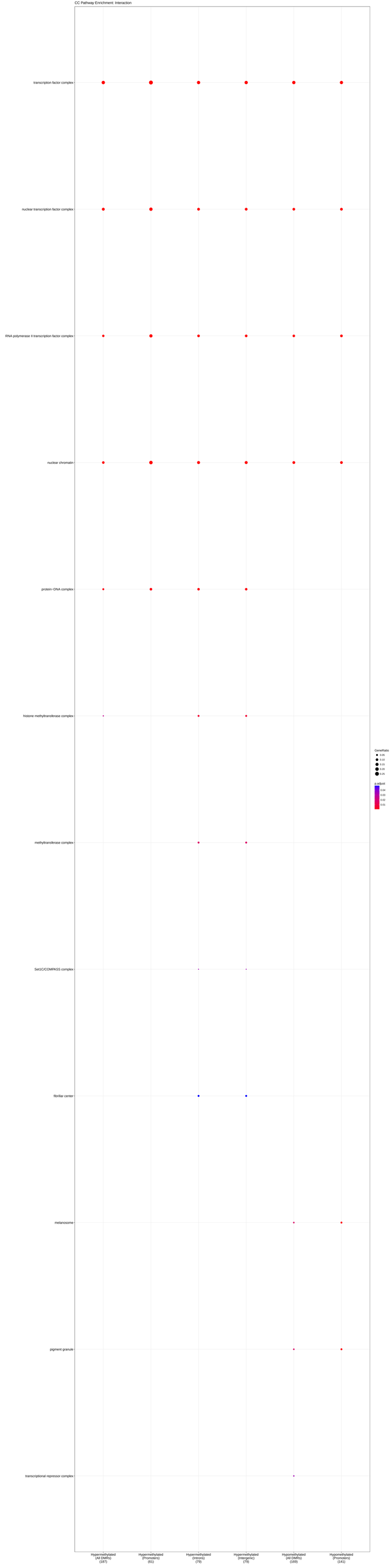

CC Pathway Enrichment: CellType
transcription factor complex
nuclear transcription factor complex
nuclear chromatin
RNA polymerase II transcription factor complex
protein−DNA complex
nuclear euchromatin
euchromatin
fibrillar center
nucleolar part
melanosome
pigment granule
intercellular bridge
histone methyltransferase complex
nuclear speck
methyltransferase complex
spliceosomal complex
MLL1/2 complex
MLL1 complex
transcriptional repressor complex
chromatoid body
Set1/COMPASS complex
Hypermethylated (All DMRs) (268)
Hypermethylated (Promoters) (222)
Hypermethylated (Introns) (302)
Hypermethylated (Intergenic) (302)
Hypomethylated (All DMRs) (243)
Hypomethylated (Promoters) (125)
Hypomethylated (Introns) (73)
Hypomethylated (Intergenic) (73)
GeneRatio
0.05
0.10
0.15
0.20
p.adjust
0.04
0.03
0.02
0.01


Biological Process GO Enrichment: CellType
Hypermethylated (All DMRs) (264)
Hypermethylated (Promoters) (219)
Hypermethylated (Introns) (299)
Hypermethylated (Intergenic) (299)
Hypomethylated (All DMRs) (241)
Hypomethylated (Promoters) (123)
Hypomethylated (Introns) (72)
Hypomethylated (Intergenic) (72)
p.adjust
0.04
0.03
0.02
0.01
GeneRatio
0.04
0.08
0.12
0.16

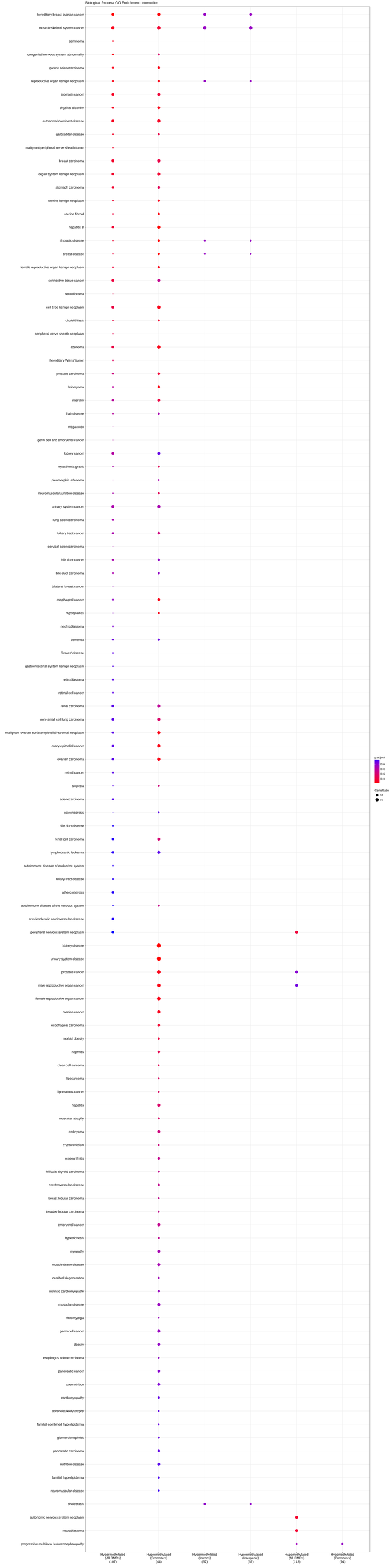

Biological Process GO Enrichment: CellType
musculoskeletal system cancer
hepatitis B
connective tissue cancer
gastric adenocarcinoma
obesity
overnutrition
cell type benign neoplasm
nutrition disease
female reproductive organ cancer
adenoma
non−small cell lung carcinoma
breast adenocarcinoma
kidney cancer
autosomal dominant disease
reproductive organ benign neoplasm
progressive multifocal leukoencephalopathy
mammary Paget's disease
hereditary breast ovarian cancer
stomach carcinoma
lung adenocarcinoma
malignant ovarian surface epithelial−stromal neoplasm
ovary epithelial cancer
ovarian carcinoma
urinary system cancer
physical disorder
lymphoblastic leukemia
breast carcinoma
retinoblastoma
retinal cell cancer
urinary system disease
retinal cancer
placenta cancer
choriocarcinoma
nephroblastoma
stomach cancer
prostate cancer
uterine benign neoplasm
uterine fibroid
kidney disease
hepatitis
ovarian cancer
renal cell carcinoma
male reproductive organ cancer
cervix carcinoma
female reproductive organ benign neoplasm
cervical cancer
hair disease
muscular atrophy
peripheral nervous system neoplasm
sensory system cancer
ocular cancer
alopecia
leiomyoma
alveolar rhabdomyosarcoma
clear cell sarcoma
gallbladder disease
hereditary Wilms' tumor
renal carcinoma
prostate carcinoma
hypospadias
hypotrichosis
familial hyperlipidemia
thoracic disease
breast disease
liposarcoma
lipomatous cancer
bone giant cell tumor
neurofibroma
bone cancer
muscle cancer
chondrosarcoma
autonomic nervous system neoplasm
neuroblastoma
atherosclerosis
arteriosclerotic cardiovascular disease
congenital nervous system abnormality
colon carcinoma
cholelithiasis
lipid metabolism disorder
arteriosclerosis
esophageal cancer
organ system benign neoplasm
head and neck squamous cell carcinoma
head and neck carcinoma
osteoporosis
hyperthyroidism
hypersensitivity reaction type I disease
inherited metabolic disorder
bone resorption disease
biliary tract cancer
integumentary system cancer
skin cancer
head and neck cancer
neuroectodermal tumor
osteosarcoma
giant cell tumor
lipid storage disease
Parkinson's disease
osteoarthritis
rhabdomyosarcoma
mouth disease
colon cancer
germ cell and embryonal cancer
embryonal rhabdomyosarcoma
colorectal cancer
large intestine cancer
endocrine pancreas disease
skeletal muscle cancer
pleomorphic adenoma
gestational diabetes
hyperglycemia
cervical adenocarcinoma
malignant peripheral nerve sheath tumor
bile duct cancer
bile duct carcinoma
bile duct disease
salivary gland adenoid cystic carcinoma
cholestasis
multiple myeloma
endocrine system disease
biliary tract disease
thyroid cancer
germ cell cancer
familial combined hyperlipidemia
osteonecrosis
cervical squamous cell carcinoma
thyroid carcinoma
embryoma
myeloma
ovarian disease
bone marrow cancer
esophageal carcinoma
brain cancer
embryonal cancer
premature ovarian failure
ischemic bone disease
seminoma
peripheral nerve sheath neoplasm
sarcoma
telangiectasis
bipolar disorder
pilocytic astrocytoma
Hypermethylated (All DMRs) (169)
Hypermethylated (Promoters) (143)
Hypermethylated (Introns) (182)
Hypermethylated (Intergenic) (182)
Hypomethylated (All DMRs) (151)
Hypomethylated (Promoters) (84)
GeneRatio
0.05
0.10
0.15
p.adjust
0.04
0.03
0.02
0.01


KEGG Pathway Enrichment: Interaction
Osteoclast differentiation
Endocrine resistance
Estrogen signaling pathway
Spliceosome
Breast cancer
MAPK signaling pathway
IL−17 signaling pathway
Thyroid cancer
Transcriptional misregulation in cancer
Colorectal cancer
TNF signaling pathway
Hepatitis B
HTLV−I infection
Th17 cell differentiation
Relaxin signaling pathway
Wnt signaling pathway
Amphetamine addiction
Prolactin signaling pathway
Small cell lung cancer
Kaposi's sarcoma−associated herpesvirus infection
Chagas disease (American trypanosomiasis)
Renal cell carcinoma
Mitophagy − animal
Circadian rhythm
Signaling pathways regulating pluripotency of stem cells
Insulin resistance
Thyroid hormone signaling pathway
AMPK signaling pathway
Hypermethylated (All DMRs) (81)
Hypermethylated (Promoters) (30)
Hypermethylated (Introns) (45)
Hypermethylated (Intergenic) (45)
Hypomethylated (All DMRs) (91)
Hypomethylated (Promoters) (76)
GeneRatio
0.05
0.10
0.15
0.20
0.25
p.adjust
0.04
0.03
0.02
0.01


MF Pathway Enrichment: Interaction
transcriptional activator activity, RNA polymerase II transcription regulatory region sequence−specific binding
transcription factor activity, RNA polymerase II core promoter proximal region sequence−specific binding
core promoter proximal region DNA binding
transcriptional activator activity, RNA polymerase II core promoter proximal region sequence−specific binding
core promoter proximal region sequence−specific DNA binding
RNA polymerase II core promoter proximal region sequence−specific DNA binding
transcription factor activity, RNA polymerase II distal enhancer sequence−specific binding
E−box binding
protein heterodimerization activity
core promoter binding
RNA polymerase II transcription factor binding
transcriptional repressor activity, RNA polymerase II transcription regulatory region sequence−specific binding
enhancer binding
core promoter sequence−specific DNA binding
enhancer sequence−specific DNA binding
transcription factor activity, RNA polymerase II transcription factor binding
transcriptional activator activity, RNA polymerase II transcription factor binding
transcription coactivator activity
RNA polymerase II distal enhancer sequence−specific DNA binding
transcription cofactor binding
steroid hormone receptor activity
nuclear receptor activity
transcription factor activity, direct ligand regulated sequence−specific DNA binding
transcriptional repressor activity, RNA polymerase II core promoter proximal region sequence−specific binding
transcription corepressor activity
steroid hormone receptor binding
transcription coactivator binding
RNA polymerase II activating transcription factor binding
activating transcription factor binding
androgen receptor binding
nuclear hormone receptor binding
histone deacetylase binding
bHLH transcription factor binding
hormone receptor binding
RNA polymerase II core promoter sequence−specific DNA binding
transcription factor activity, transcription factor recruiting
promoter−specific chromatin binding
heat shock protein binding
beta−catenin binding
R−SMAD binding
histone acetyltransferase binding
steroid binding
nucleocytoplasmic transporter activity
chromatin DNA binding
co−SMAD binding
cAMP response element binding
translation elongation factor activity
SMAD binding
ligand−dependent nuclear receptor binding
transcription factor activity, RNA polymerase II core promoter sequence−specific
estrogen receptor binding
HMG box domain binding
repressing transcription factor binding
WW domain binding
Hsp90 protein binding
rDNA binding
protein kinase B binding
RNA polymerase II basal transcription factor binding
glucocorticoid receptor binding
S100 protein binding
transcriptional repressor activity, RNA polymerase II transcription factor binding
cysteine−type endopeptidase regulator activity involved in apoptotic process
ubiquitin−like protein ligase binding
vitamin D receptor binding
MHC class II protein complex binding
Hypermethylated (All DMRs) (185)
Hypermethylated (Promoters) (62)
Hypermethylated (Introns) (79)
Hypermethylated (Intergenic) (79)
Hypomethylated (All DMRs) (170)
Hypomethylated (Promoters) (141)
GeneRatio
0.1
0.2
0.3
p.adjust
0.04
0.03
0.02
0.01


CC Pathway Enrichment: Interaction
transcription factor complex
nuclear transcription factor complex
RNA polymerase II transcription factor complex
nuclear chromatin
protein−DNA complex
histone methyltransferase complex
methyltransferase complex
Set1C/COMPASS complex
fibrillar center
melanosome
pigment granule
transcriptional repressor complex
Hypermethylated (All DMRs) (187)
Hypermethylated (Promoters) (61)
Hypermethylated (Introns) (79)
Hypermethylated (Intergenic) (79)
Hypomethylated (All DMRs) (169)
Hypomethylated (Promoters) (141)
GeneRatio
0.05
0.10
0.15
0.20
0.25
p.adjust
0.04
0.03
0.02
0.01

Biological Process GO Enrichment: Interaction
p.adjust
0.04
0.03
0.02
0.01
GeneRatio
0.05
0.10
0.15
0.20
0.25
Hypermethylated (All DMRs) (183)
Hypermethylated (Promoters) (62)
Hypermethylated (Introns) (78)
Hypermethylated (Intergenic) (78)
Hypomethylated (All DMRs) (168)
Hypomethylated (Promoters) (138)


Biological Process GO Enrichment: Interaction
hereditary breast ovarian cancer
musculoskeletal system cancer
seminoma
congenital nervous system abnormality
gastric adenocarcinoma
reproductive organ benign neoplasm
stomach cancer
physical disorder
autosomal dominant disease
gallbladder disease
malignant peripheral nerve sheath tumor
breast carcinoma
organ system benign neoplasm
stomach carcinoma
uterine benign neoplasm
uterine fibroid
hepatitis B
thoracic disease
breast disease
female reproductive organ benign neoplasm
connective tissue cancer
neurofibroma
cell type benign neoplasm
cholelithiasis
peripheral nerve sheath neoplasm
adenoma
hereditary Wilms' tumor
prostate carcinoma
leiomyoma
infertility
hair disease
megacolon
germ cell and embryonal cancer
kidney cancer
myasthenia gravis
pleomorphic adenoma
neuromuscular junction disease
urinary system cancer
lung adenocarcinoma
biliary tract cancer
cervical adenocarcinoma
bile duct cancer
bile duct carcinoma
bilateral breast cancer
esophageal cancer
hypospadias
nephroblastoma
dementia
Graves' disease
gastrointestinal system benign neoplasm
retinoblastoma
retinal cell cancer
renal carcinoma
non−small cell lung carcinoma
malignant ovarian surface epithelial−stromal neoplasm
ovary epithelial cancer
ovarian carcinoma
retinal cancer
alopecia
adenocarcinoma
osteonecrosis
bile duct disease
renal cell carcinoma
lymphoblastic leukemia
autoimmune disease of endocrine system
biliary tract disease
atherosclerosis
autoimmune disease of the nervous system
arteriosclerotic cardiovascular disease
peripheral nervous system neoplasm
kidney disease
urinary system disease
prostate cancer
male reproductive organ cancer
female reproductive organ cancer
ovarian cancer
esophageal carcinoma
morbid obesity
nephritis
clear cell sarcoma
liposarcoma
lipomatous cancer
hepatitis
muscular atrophy
embryoma
cryptorchidism
osteoarthritis
follicular thyroid carcinoma
cerebrovascular disease
breast lobular carcinoma
invasive lobular carcinoma
embryonal cancer
hypotrichosis
myopathy
muscle tissue disease
cerebral degeneration
intrinsic cardiomyopathy
muscular disease
fibromyalgia
germ cell cancer
obesity
esophagus adenocarcinoma
pancreatic cancer
overnutrition
cardiomyopathy
adrenoleukodystrophy
familial combined hyperlipidemia
glomerulonephritis
pancreatic carcinoma
nutrition disease
familial hyperlipidemia
neuromuscular disease
cholestasis
autonomic nervous system neoplasm
neuroblastoma
progressive multifocal leukoencephalopathy
Hypermethylated (All DMRs) (107)
Hypermethylated (Promoters) (44)
Hypermethylated (Introns) (52)
Hypermethylated (Intergenic) (52)
Hypomethylated (All DMRs) (118)
Hypomethylated (Promoters) (94)
p.adjust
0.04
0.03
0.02
0.01
GeneRatio
0.1
0.2