KEGG Pathway Enrichment: allAge Transcriptional misregulation in cancer Non-small cell lung cancer HTLV-I infection Hepatitis B Thyroid cancer Th17 cell differentiation Thyroid hormone signaling pathway Small cell lung cancer Breast cancer Osteoclast differentiation Longevity regulating pathway Prostate cancer Circadian rhythm Chronic myeloid leukemia TNF signaling pathway Colorectal cancer Gastric cancer Bladder cancer Mitophagy – animal Endocrine resistance Pancreatic cancer Kaposi's sarcoma-associated herpesvirus infection **Endometrial cancer** Neurotrophin signaling pathway Cushing's syndrome AMPK signaling pathway Cellular senescence Protein processing in endoplasmic reticulum Hepatocellular carcinoma Amphetamine addiction Renal cell carcinoma Estrogen signaling pathway Melanoma GeneRatio Insulin resistance • 0.05 Thyroid hormone synthesis Human papillomavirus infection Antigen processing and presentation Cocaine addiction Hippo signaling pathway p.adjust Amyotrophic lateral sclerosis (ALS) Viral carcinogenesis MAPK signaling pathway Cell cycle PI3K-Akt signaling pathway Relaxin signaling pathway IL-17 signaling pathway Spliceosome Aldosterone synthesis and secretion Longevity regulating pathway – multiple species Cortisol synthesis and secretion **Apoptosis** Signaling pathways regulating pluripotency of stem cells Inflammatory bowel disease (IBD) Prion diseases Acute myeloid leukemia Huntington's disease Glioma PPAR signaling pathway Platinum drug resistance Non-alcoholic fatty liver disease (NAFLD) Leishmaniasis **Pertussis** Salmonella infection **Tuberculosis** Herpes simplex infection Legionellosis Adipocytokine signaling pathway B cell receptor signaling pathway Dopaminergic synapse TGF-beta signaling pathway cAMP signaling pathway Th1 and Th2 cell differentiation Epstein-Barr virus infection AGE-RAGE signaling pathway in diabetic complications Chagas disease (American trypanosomiasis) T cell receptor signaling pathway Glucagon signaling pathway Q25 Q75 (68)(99)

0.10

0.15

0.20

0.04

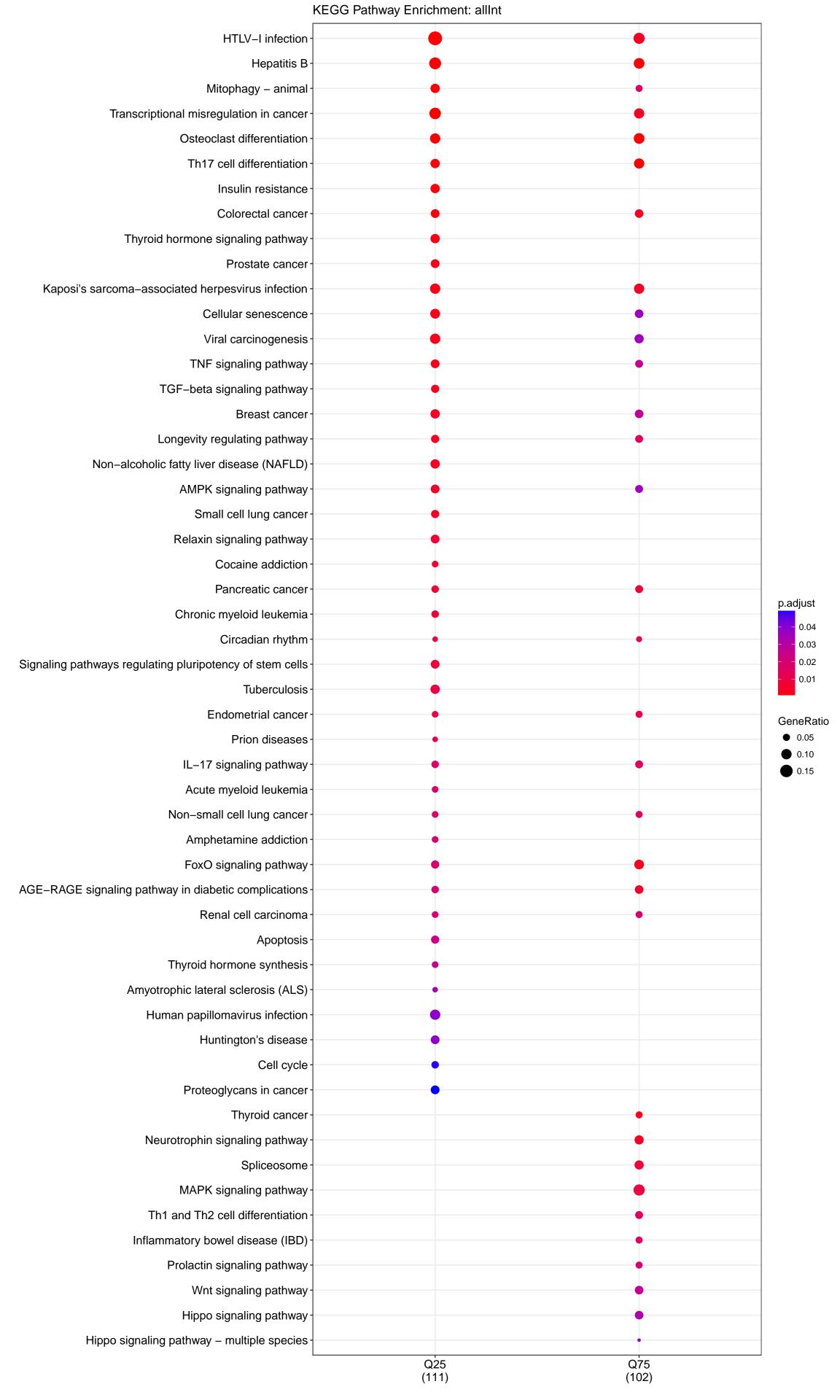
0.03

0.02

(178)

(130)

CC Pathway Enrichment: allAge transcription factor complex-RNA polymerase II transcription factor complexnuclear transcription factor complexnuclear chromatin histone methyltransferase complexmethyltransferase complexp.adjust euchromatin 0.04 0.03 0.02 0.01 protein-DNA complex-GeneRatio • 0.04 0.08 0.12 nuclear speck-0.16 fibrillar center nuclear euchromatin MLL1/2 complex MLL1 complex PML body nuclear periphery Q25 (176) Q75 (130)



0.04

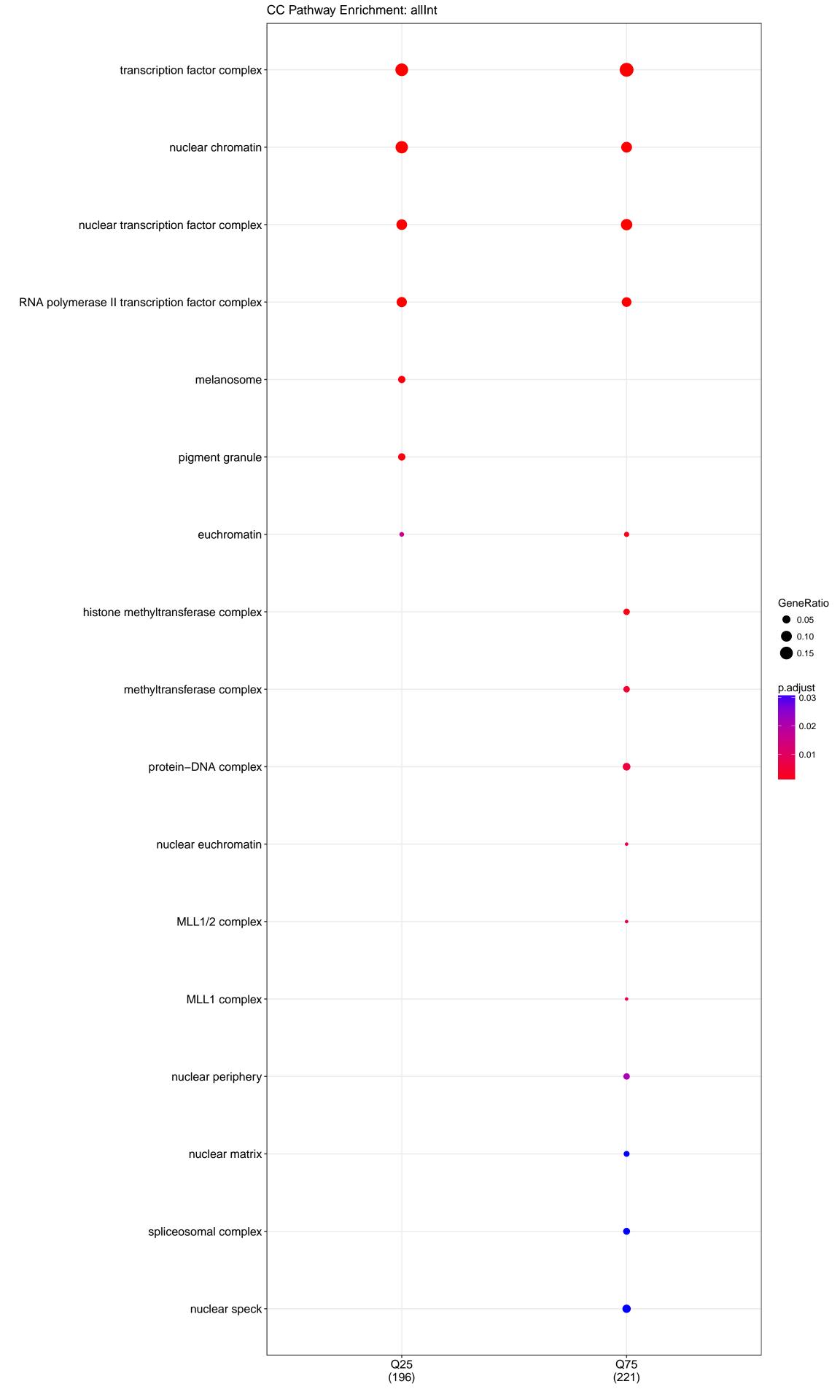
0.03

0.02

0.01

(197)

(219)

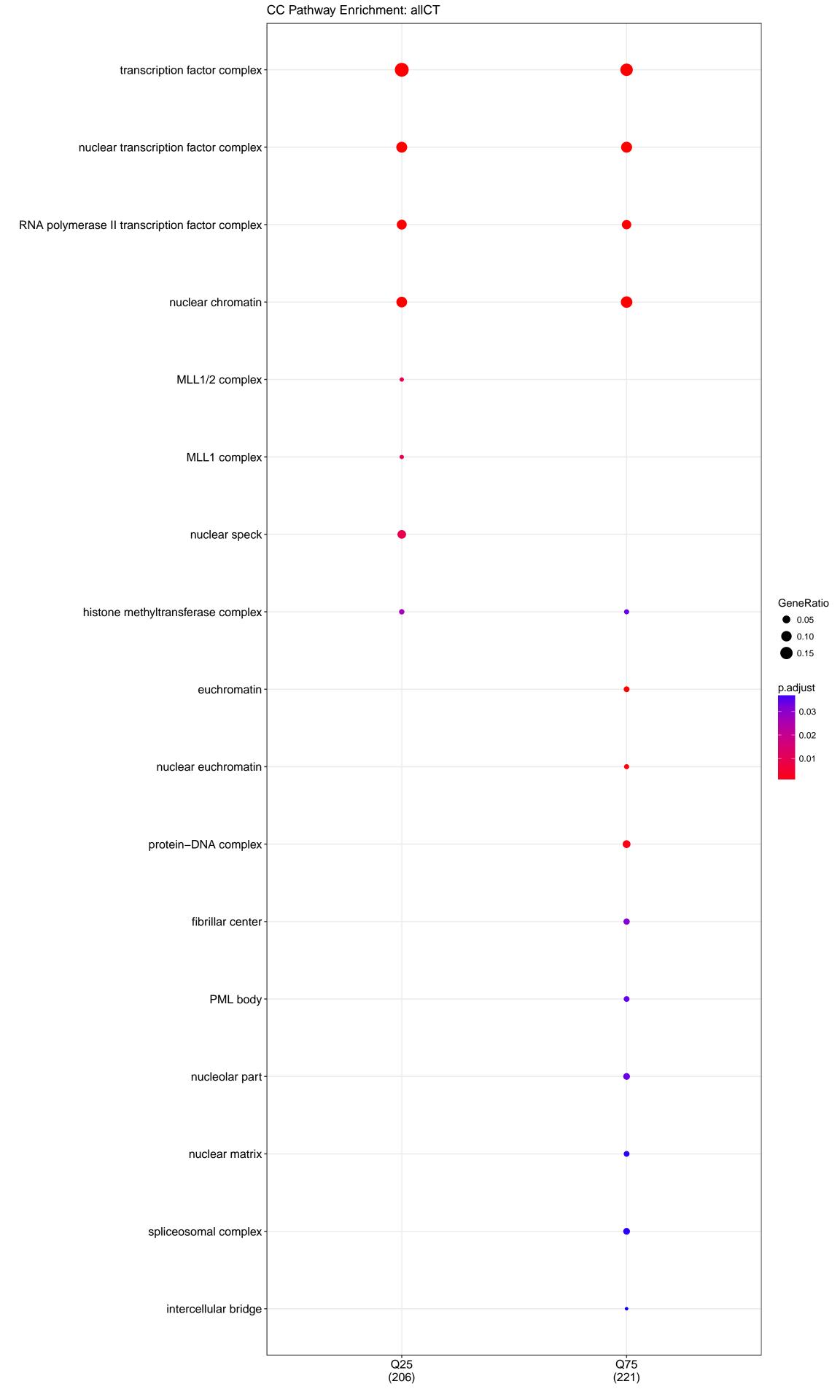


KEGG Pathway Enrichment: allCT HTLV-I infection -Circadian rhythm Transcriptional misregulation in cancer FoxO signaling pathway Th17 cell differentiation Hepatitis B MAPK signaling pathway Colorectal cancer Longevity regulating pathway Hippo signaling pathway Mitophagy - animal · Osteoclast differentiation cGMP-PKG signaling pathway TNF signaling pathway Cellular senescence IL-17 signaling pathway Amphetamine addiction Apelin signaling pathway Signaling pathways regulating pluripotency of stem cells Pancreatic cancer Kaposi's sarcoma-associated herpesvirus infection Cocaine addiction Viral carcinogenesis Hippo signaling pathway – multiple species mRNA surveillance pathway **Endometrial cancer** Dopaminergic synapse Basal cell carcinoma p.adjust Apoptosis -0.04 AGE-RAGE signaling pathway in diabetic complications 0.03 Acute myeloid leukemia 0.02 Thyroid cancer 0.01 Prostate cancer Inflammatory bowel disease (IBD) GeneRatio Thyroid hormone signaling pathway 0.04 0.08 Prolactin signaling pathway 0.12 Hepatocellular carcinoma 0.16 **Tuberculosis** Breast cancer Gastric cancer Neurotrophin signaling pathway Non-small cell lung cancer Adherens junction Relaxin signaling pathway Chronic myeloid leukemia Insulin resistance Wnt signaling pathway TGF-beta signaling pathway Epstein-Barr virus infection Hepatitis C Renal cell carcinoma Spliceosome Melanogenesis Chagas disease (American trypanosomiasis) Estrogen signaling pathway Leishmaniasis Toxoplasmosis Cushing's syndrome Legionellosis AMPK signaling pathway cAMP signaling pathway Th1 and Th2 cell differentiation Small cell lung cancer Longevity regulating pathway – multiple species Endocrine resistance Q75 Q25 (111)(97)



Q25 Q75 (204)(223) 0.04

0.03 0.02





0.04

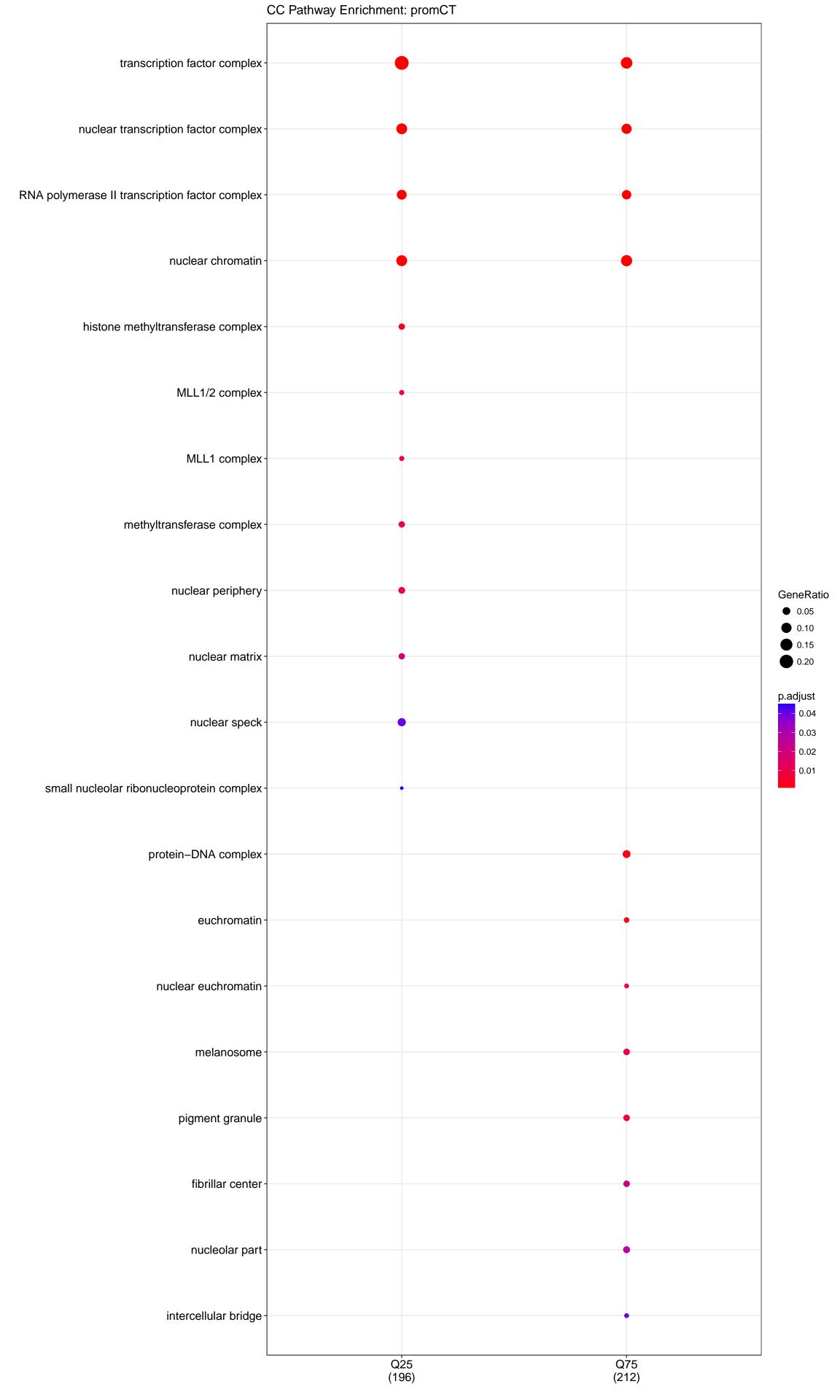
0.03

0.02

0.01

(193)

(213)



KEGG Pathway Enrichment: promAge Transcriptional misregulation in cancer HTLV-I infection Hepatitis B Th17 cell differentiation Non-small cell lung cancer Thyroid hormone signaling pathway Thyroid cancer Osteoclast differentiation Longevity regulating pathway Small cell lung cancer Prostate cancer Circadian rhythm Chronic myeloid leukemia TNF signaling pathway **Endometrial cancer** Colorectal cancer Breast cancer Bladder cancer Kaposi's sarcoma-associated herpesvirus infection Mitophagy – animal Cushing's syndrome Endocrine resistance Hepatocellular carcinoma Pancreatic cancer Gastric cancer Neurotrophin signaling pathway Prion diseases AMPK signaling pathway Cellular senescence Protein processing in endoplasmic reticulum Amphetamine addiction Renal cell carcinoma MAPK signaling pathway GeneRatio Estrogen signaling pathway • 0.05 Melanoma Thyroid hormone synthesis Insulin resistance Antigen processing and presentation Cocaine addiction p.adjust Amyotrophic lateral sclerosis (ALS) Hippo signaling pathway Viral carcinogenesis Cell cycle IL-17 signaling pathway Relaxin signaling pathway PI3K-Akt signaling pathway Longevity regulating pathway – multiple species Aldosterone synthesis and secretion Spliceosome Cortisol synthesis and secretion **Tuberculosis Apoptosis** Inflammatory bowel disease (IBD) Signaling pathways regulating pluripotency of stem cells Acute myeloid leukemia Non-alcoholic fatty liver disease (NAFLD) Leishmaniasis **Pertussis** Salmonella infection Herpes simplex infection Huntington's disease Legionellosis B cell receptor signaling pathway Dopaminergic synapse TGF-beta signaling pathway cAMP signaling pathway Epstein-Barr virus infection Th1 and Th2 cell differentiation AGE-RAGE signaling pathway in diabetic complications Chagas disease (American trypanosomiasis) T cell receptor signaling pathway Glucagon signaling pathway Toll–like receptor signaling pathway Cholinergic synapse Epithelial cell signaling in Helicobacter pylori infection Adipocytokine signaling pathway Prolactin signaling pathway **Q25** Q75 (104)(57)

0.10

0.15 0.20

0.25

0.04

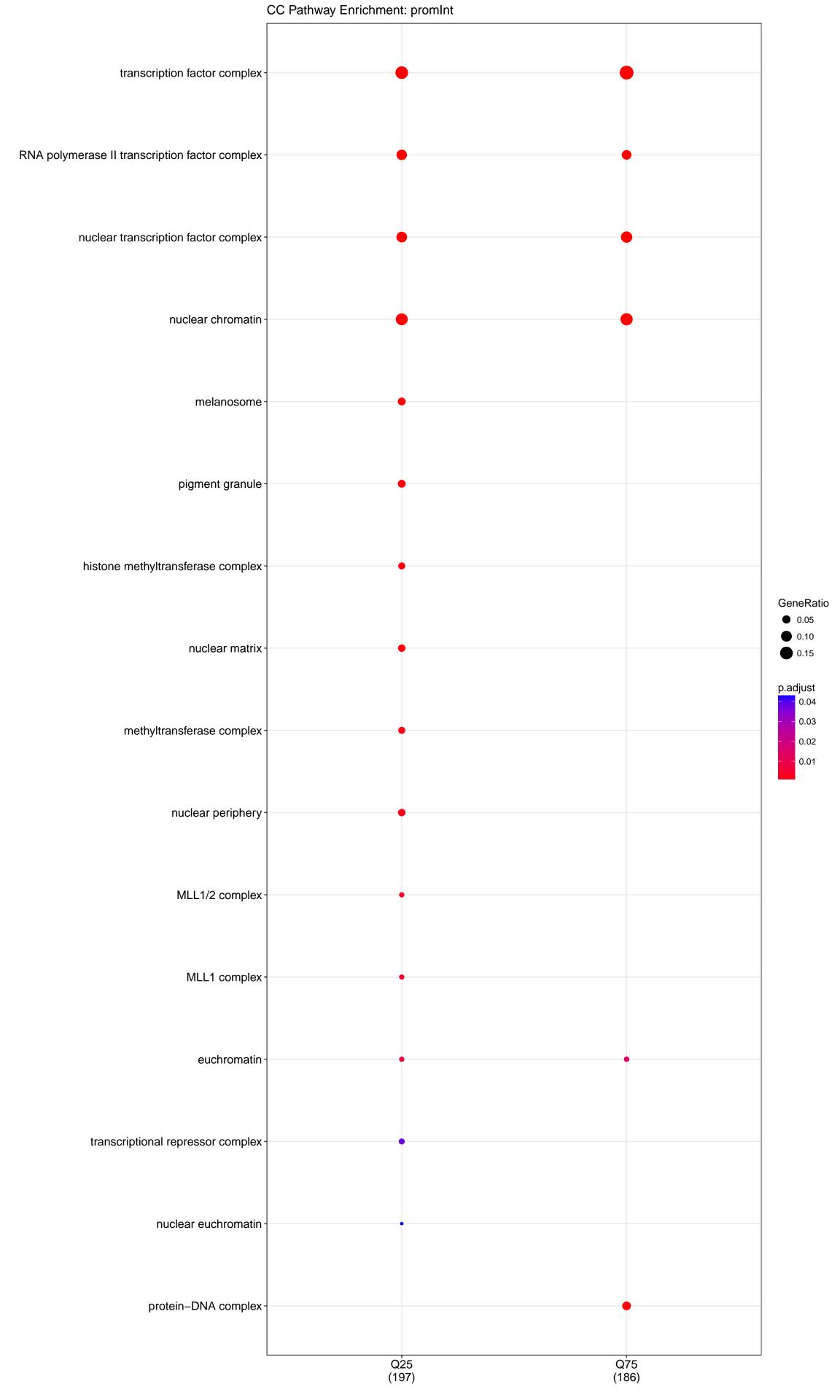
0.03

0.02

MF Pathway Enrichment: promAge transcription factor activity, RNA polymerase II core promoter proximal region sequence-specific bindingtranscriptional activator activity, RNA polymerase II transcription regulatory region sequence-specific binding core promoter proximal region DNA binding RNA polymerase II core promoter proximal region sequence–specific DNA binding core promoter proximal region sequence-specific DNA binding transcriptional activator activity, RNA polymerase II core promoter proximal region sequence-specific binding transcriptional repressor activity, RNA polymerase II transcription regulatory region sequence-specific binding nuclear receptor activity transcription factor activity, direct ligand regulated sequence-specific DNA binding protein heterodimerization activity core promoter binding transcriptional repressor activity, RNA polymerase II core promoter proximal region sequence-specific binding steroid hormone receptor activity RNA polymerase II transcription factor binding transcription factor activity, RNA polymerase II distal enhancer sequence-specific binding enhancer binding E-box binding bHLH transcription factor binding activating transcription factor binding RNA polymerase II activating transcription factor binding core promoter sequence–specific DNA binding transcription corepressor activity transcription coactivator activity cAMP response element binding transcription cofactor binding nuclear hormone receptor binding enhancer sequence-specific DNA binding p.adjust chromatin DNA binding 0.04 RNA polymerase II core promoter sequence–specific DNA binding 0.03 hormone receptor binding 0.02 histone deacetylase binding 0.01 histone acetyltransferase binding RNA polymerase II distal enhancer sequence–specific DNA binding GeneRatio transcription factor activity, RNA polymerase II transcription factor binding transcription coactivator binding heat shock protein binding retinoid X receptor binding Hsp90 protein binding retinoic acid receptor binding SMAD binding beta-catenin binding glucocorticoid receptor binding transcription factor activity, transcription factor recruiting steroid hormone receptor binding transcriptional activator activity, RNA polymerase II transcription factor binding vitamin D receptor binding ubiquitin-like protein ligase binding R-SMAD binding ubiquitin protein ligase binding chaperone binding monocarboxylic acid binding rDNA binding promoter-specific chromatin binding protein kinase B binding HMG box domain binding repressing transcription factor binding carboxy-lyase activity leucine zipper domain binding actinin binding carbon-carbon lyase activity LRR domain binding **GDP** binding ligand-dependent nuclear receptor binding translation repressor activity Q25 Q75 (197)(110)

CC Pathway Enrichment: promAge transcription factor complexnuclear transcription factor complex-RNA polymerase II transcription factor complexnuclear chromatin nuclear speckhistone methyltransferase complex-GeneRatio 0.06 0.10 methyltransferase complexp.adjust 0.02 fibrillar center 0.01 nuclear matrix melanosome pigment granule transcriptional repressor complex euchromatin nuclear periphery Q75 (111) Q25 (194)

KEGG Pathway Enrichment: promInt Hepatitis B HTLV-I infection Transcriptional misregulation in cancer Th17 cell differentiation Mitophagy – animal Thyroid hormone signaling pathway Circadian rhythm Colorectal cancer Kaposi's sarcoma-associated herpesvirus infection Small cell lung cancer Prostate cancer Viral carcinogenesis Insulin resistance TNF signaling pathway Breast cancer Prion diseases Thyroid cancer AMPK signaling pathway Non-small cell lung cancer Osteoclast differentiation Amphetamine addiction Thyroid hormone synthesis **Tuberculosis** Cocaine addiction Chronic myeloid leukemia Non-alcoholic fatty liver disease (NAFLD) Amyotrophic lateral sclerosis (ALS) Inflammatory bowel disease (IBD) Pancreatic cancer Longevity regulating pathway MAPK signaling pathway Neurotrophin signaling pathway Th1 and Th2 cell differentiation Prolactin signaling pathway p.adjust Cellular senescence 0.04 AGE-RAGE signaling pathway in diabetic complications 0.03 Legionellosis 0.02 IL–17 signaling pathway 0.01 Acute myeloid leukemia Relaxin signaling pathway B cell receptor signaling pathway GeneRatio Leishmaniasis • 0.04 Signaling pathways regulating pluripotency of stem cells 0.08 TGF-beta signaling pathway 0.12 **Endometrial cancer** 0.16 Epstein-Barr virus infection Hepatitis C FoxO signaling pathway Estrogen signaling pathway Apoptosis Bladder cancer Adipocytokine signaling pathway Renal cell carcinoma Chagas disease (American trypanosomiasis) T cell receptor signaling pathway Toll-like receptor signaling pathway-Wnt signaling pathway Gastric cancer **Pertussis** Toxoplasmosis cAMP signaling pathway Sphingolipid signaling pathway PI3K-Akt signaling pathway Salmonella infection Influenza A Measles Endocrine resistance Fluid shear stress and atherosclerosis Base excision repair HIF-1 signaling pathway Herpes simplex infection Huntington's disease Oxytocin signaling pathway Hippo signaling pathway Platinum drug resistance cGMP-PKG signaling pathway EGFR tyrosine kinase inhibitor resistance Human papillomavirus infection Hepatocellular carcinoma Q25 Q75 (92)(111)



KEGG Pathway Enrichment: intronsCT Transcriptional misregulation in cancer HTLV-I infection Circadian rhythm FoxO signaling pathway Th17 cell differentiation Hepatitis B Longevity regulating pathway Mitophagy – animal Non-small cell lung cancer Osteoclast differentiation Maturity onset diabetes of the young Viral carcinogenesis Kaposi's sarcoma-associated herpesvirus infection Colorectal cancer mRNA surveillance pathway Cellular senescence cGMP-PKG signaling pathway Inflammatory bowel disease (IBD) Amphetamine addiction AGE-RAGE signaling pathway in diabetic complications Renal cell carcinoma MAPK signaling pathway Pancreatic cancer TNF signaling pathway Cocaine addiction Hippo signaling pathway - multiple species Thyroid cancer Prostate cancer Acute myeloid leukemia **Endometrial cancer** GeneRatio 0.05 Hepatocellular carcinoma 0.10 Gastric cancer Chronic myeloid leukemia TGF-beta signaling pathway p.adjust Thyroid hormone signaling pathway Breast cancer Adherens junction Wnt signaling pathway IL-17 signaling pathway Prolactin signaling pathway Relaxin signaling pathway Signaling pathways regulating pluripotency of stem cells Tuberculosis Neurotrophin signaling pathway Hippo signaling pathway-Cushing's syndrome Th1 and Th2 cell differentiation Cell cycle Small cell lung cancer Human papillomavirus infection Endocrine resistance Bladder cancer Hepatitis C Spliceosome Melanogenesis Chagas disease (American trypanosomiasis) Estrogen signaling pathway **Apoptosis** Leishmaniasis Insulin resistance **Pertussis** Antigen processing and presentation -Herpes simplex infection AMPK signaling pathway cAMP signaling pathway-Protein processing in endoplasmic reticulum Longevity regulating pathway – multiple species Basal cell carcinoma Q<sup>75</sup> (112) **Q25** (104)

0.15

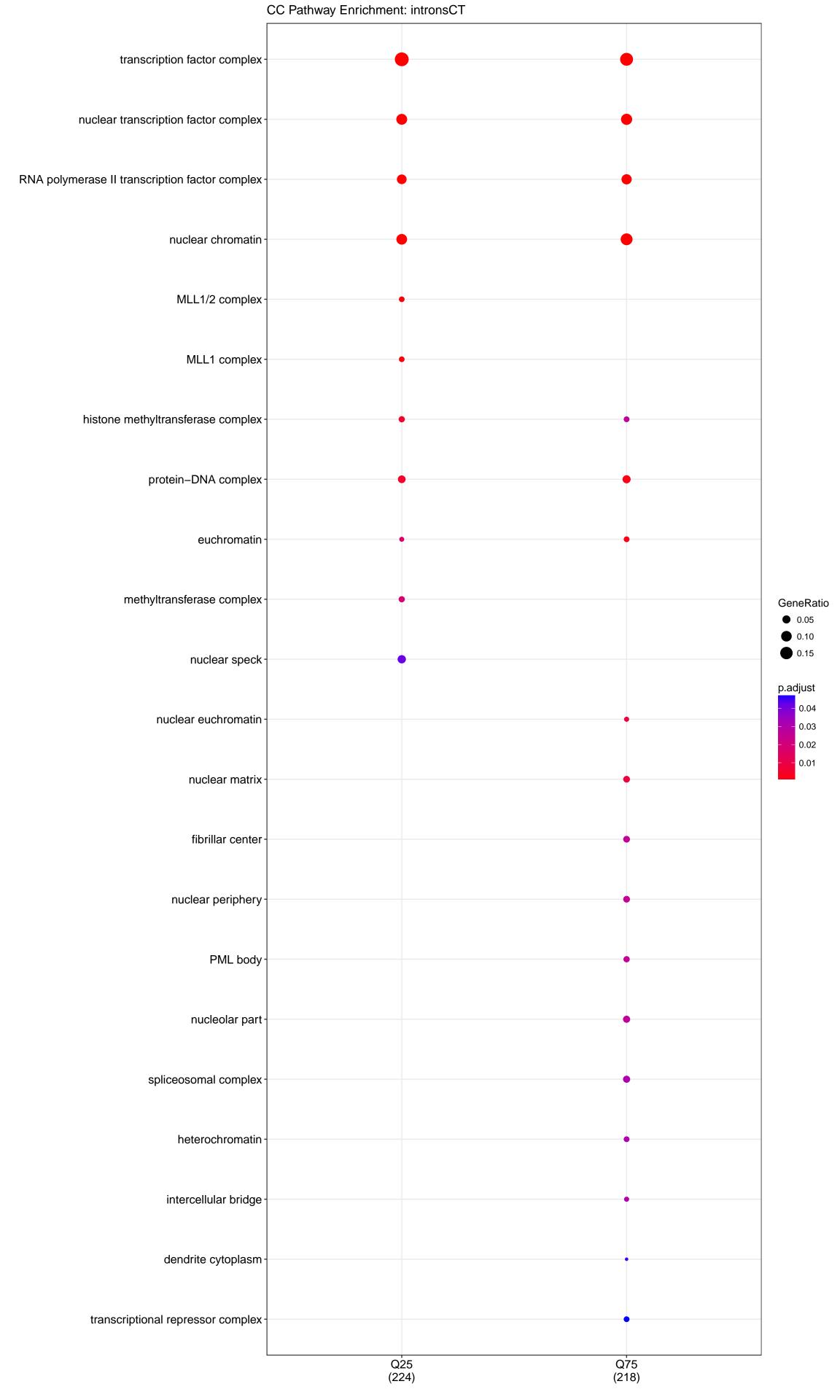
0.04

0.03

0.02

(222)(221) 0.04

0.03



KEGG Pathway Enrichment: intronsAge Hepatitis B-HTLV-I infection Th17 cell differentiation Transcriptional misregulation in cancer-Mitophagy – animal Colorectal cancer Osteoclast differentiation Signaling pathways regulating pluripotency of stem cells Circadian rhythm Kaposi's sarcoma-associated herpesvirus infection AGE-RAGE signaling pathway in diabetic complications Pancreatic cancer Insulin resistance TGF-beta signaling pathway Thyroid hormone signaling pathway Inflammatory bowel disease (IBD) Renal cell carcinoma FoxO signaling pathway Viral carcinogenesis Chronic myeloid leukemia TNF signaling pathway **Tuberculosis** Breast cancer Non-alcoholic fatty liver disease (NAFLD) Herpes simplex infection Longevity regulating pathway GeneRatio 0.1 IL-17 signaling pathway 0.2 Small cell lung cancer Cellular senescence p.adjust 0.04 Acute myeloid leukemia Non-small cell lung cancer 0.03 Prostate cancer 0.02 Relaxin signaling pathway 0.01 Prolactin signaling pathway Apoptosis Antigen processing and presentation Cocaine addiction Amyotrophic lateral sclerosis (ALS) Cell cycle Thyroid cancer Bladder cancer Gastric cancer PI3K-Akt signaling pathway-Endocrine resistance Neurotrophin signaling pathway AMPK signaling pathway Dopaminergic synapse Estrogen signaling pathway-Amphetamine addiction Adipocytokine signaling pathway Glioma PPAR signaling pathway Melanoma Wnt signaling pathway Cushing's syndrome Hepatocellular carcinoma MAPK signaling pathway-Glucagon signaling pathway Epstein-Barr virus infection Q25 Q75 (34)(115)

isoprenoid binding

Q25

(206)

Q75

(78)

carboxy-lyase activity

CC Pathway Enrichment: intronsAge transcription factor complexnuclear transcription factor complex-RNA polymerase II transcription factor complex nuclear chromatin histone methyltransferase complexmethyltransferase complex p.adjust 0.025 0.020 0.015 0.010 0.005 melanosome GeneRatio • 0.05 0.10 pigment granule MLL1/2 complex MLL1 complex fibrillar center nuclear matrix nuclear periphery Q75 (79) Q25 (203)

KEGG Pathway Enrichment: intronsInt Prostate cancer Hepatitis B Human papillomavirus infection Pancreatic cancer Chronic myeloid leukemia Small cell lung cancer Kaposi's sarcoma-associated herpesvirus infection HTLV-I infection Cocaine addiction Longevity regulating pathway Breast cancer TNF signaling pathway Mitophagy – animal Non-small cell lung cancer Melanoma Transcriptional misregulation in cancer Viral carcinogenesis Bladder cancer Cushing's syndrome Endocrine resistance Cellular senescence Insulin resistance **Tuberculosis** Acute myeloid leukemia cAMP signaling pathway Relaxin signaling pathway Glioma Thyroid hormone synthesis **Apoptosis** PI3K-Akt signaling pathway Hepatocellular carcinoma Vasopressin-regulated water reabsorption Th17 cell differentiation Amyotrophic lateral sclerosis (ALS) GeneRatio Huntington's disease • 0.1 Thyroid hormone signaling pathway 0.2 Neurotrophin signaling pathway Cell cycle Hepatitis C p.adjust Cortisol synthesis and secretion Estrogen signaling pathway Amphetamine addiction Prolactin signaling pathway Gastric cancer cGMP-PKG signaling pathway Insulin secretion Salmonella infection IL-17 signaling pathway Antifolate resistance Aldosterone synthesis and secretion -Amoebiasis Pentose and glucuronate interconversions HIF–1 signaling pathway Melanogenesis Prion diseases MicroRNAs in cancer Glucagon signaling pathway Cholinergic synapse Toxoplasmosis Sphingolipid signaling pathway AMPK signaling pathway Amino sugar and nucleotide sugar metabolism Autophagy – animal Osteoclast differentiation Dopaminergic synapse Measles Colorectal cancer FoxO signaling pathway MAPK signaling pathway Spliceosome **Endometrial cancer** Thyroid cancer Renal cell carcinoma Signaling pathways regulating pluripotency of stem cells TGF-beta signaling pathway Hippo signaling pathway Wnt signaling pathway Hippo signaling pathway - multiple species Q25 Q75 (98)(34)

0.04

0.03

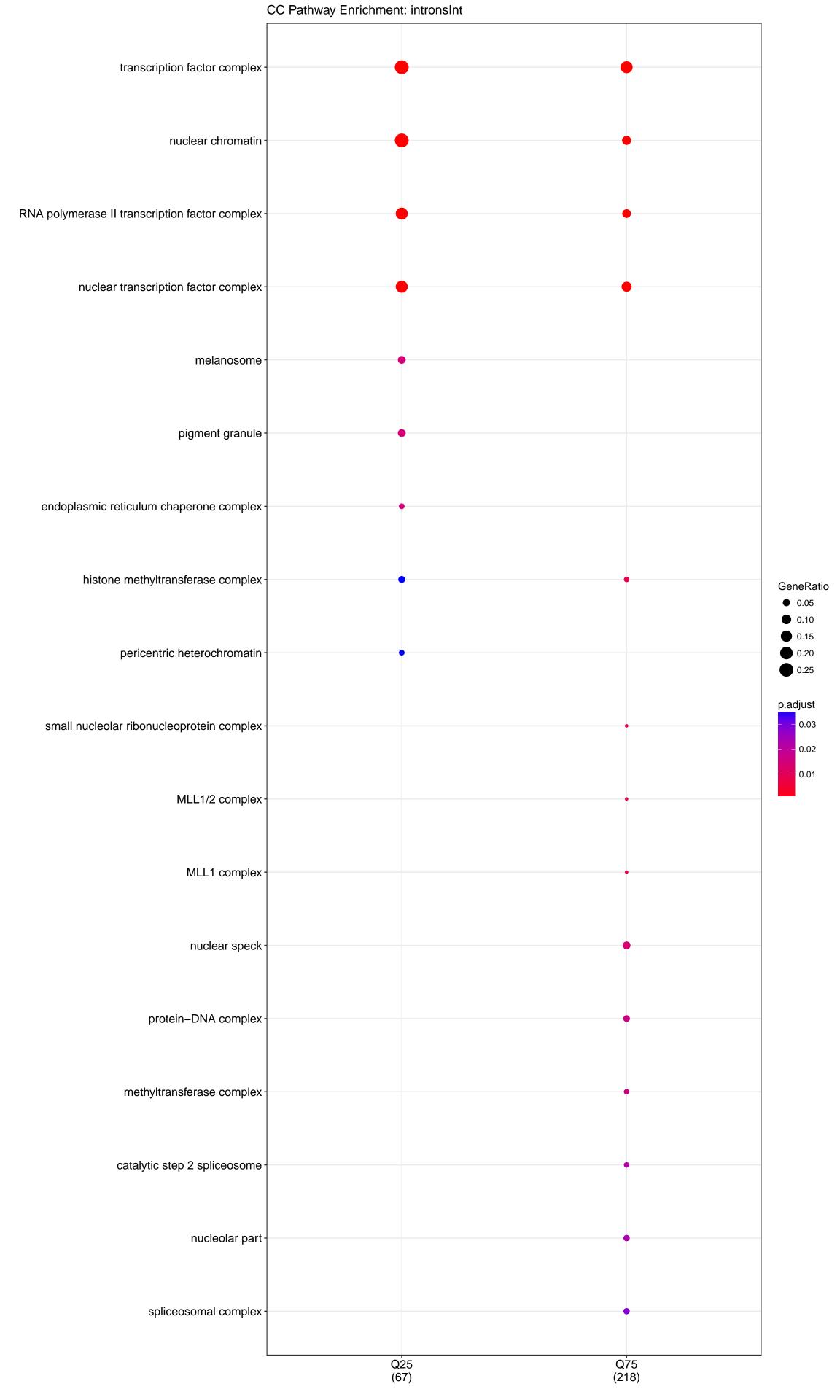
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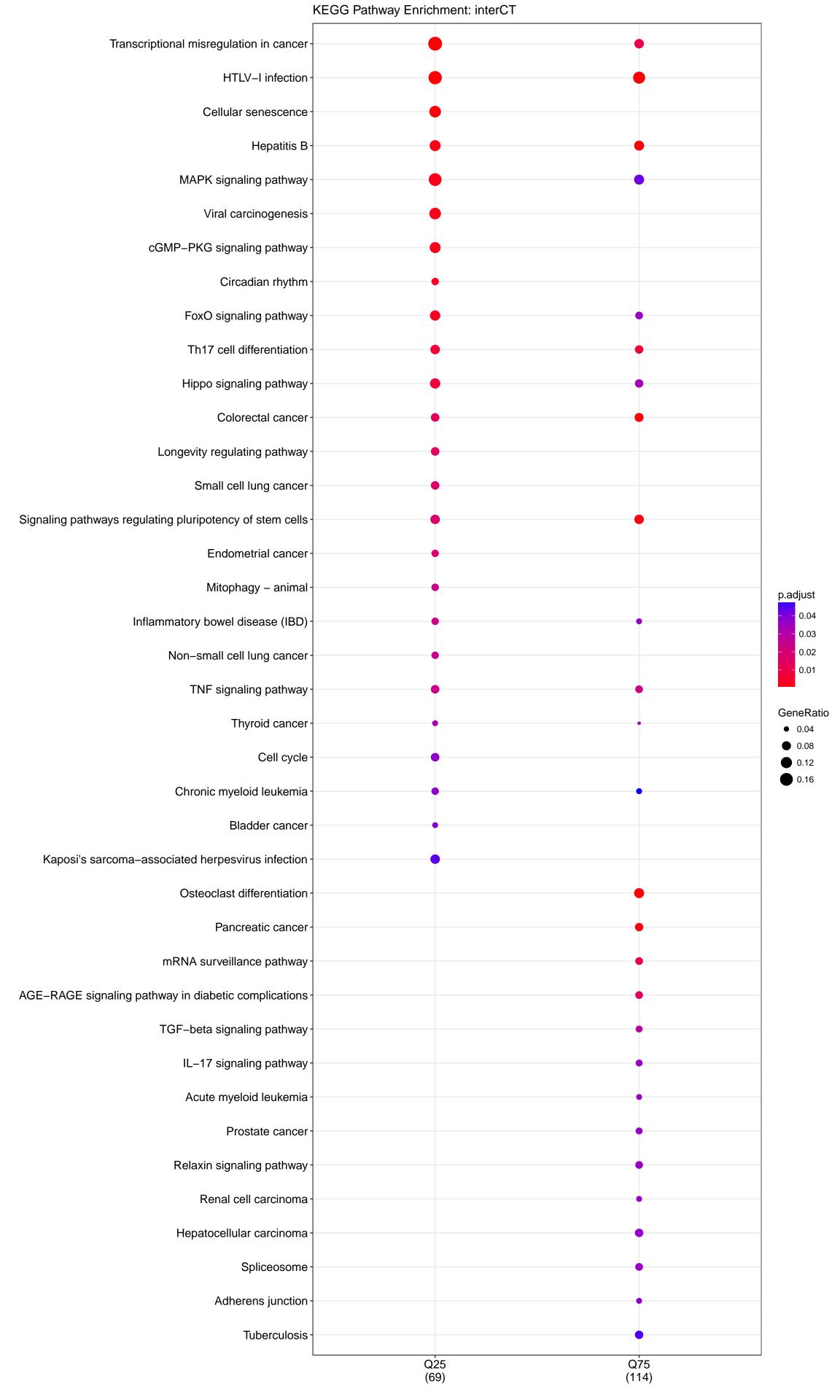
Q25

(67)

Q75

(217)

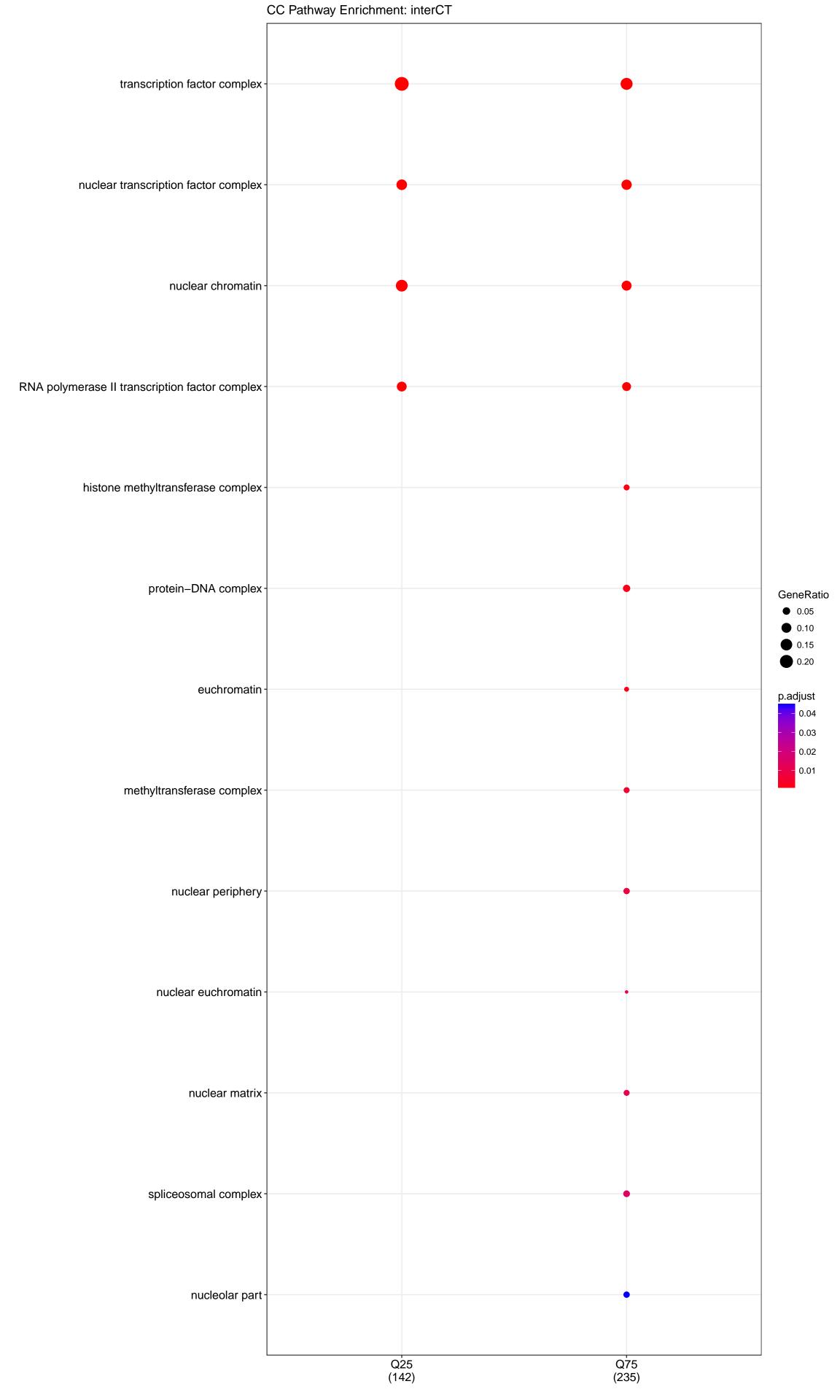


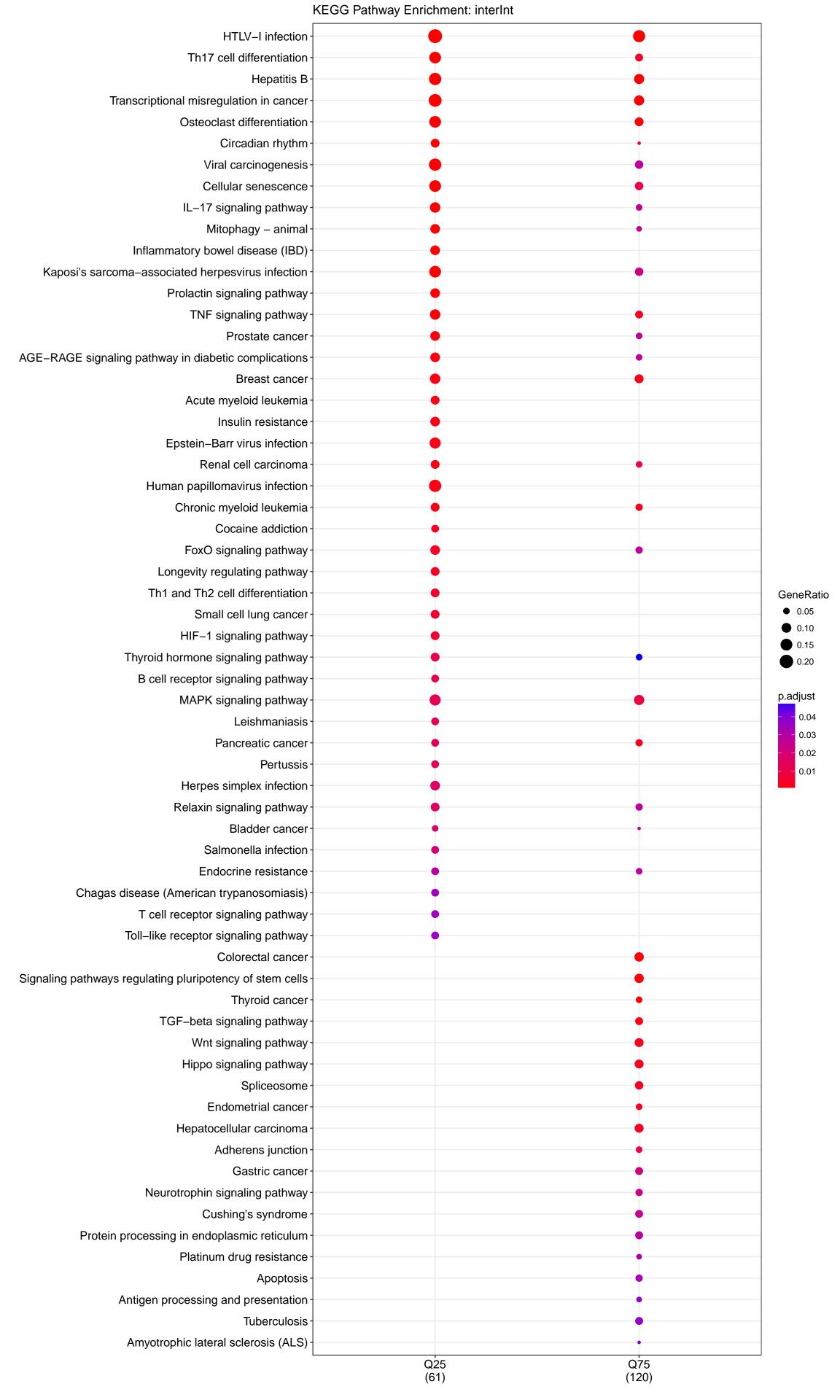


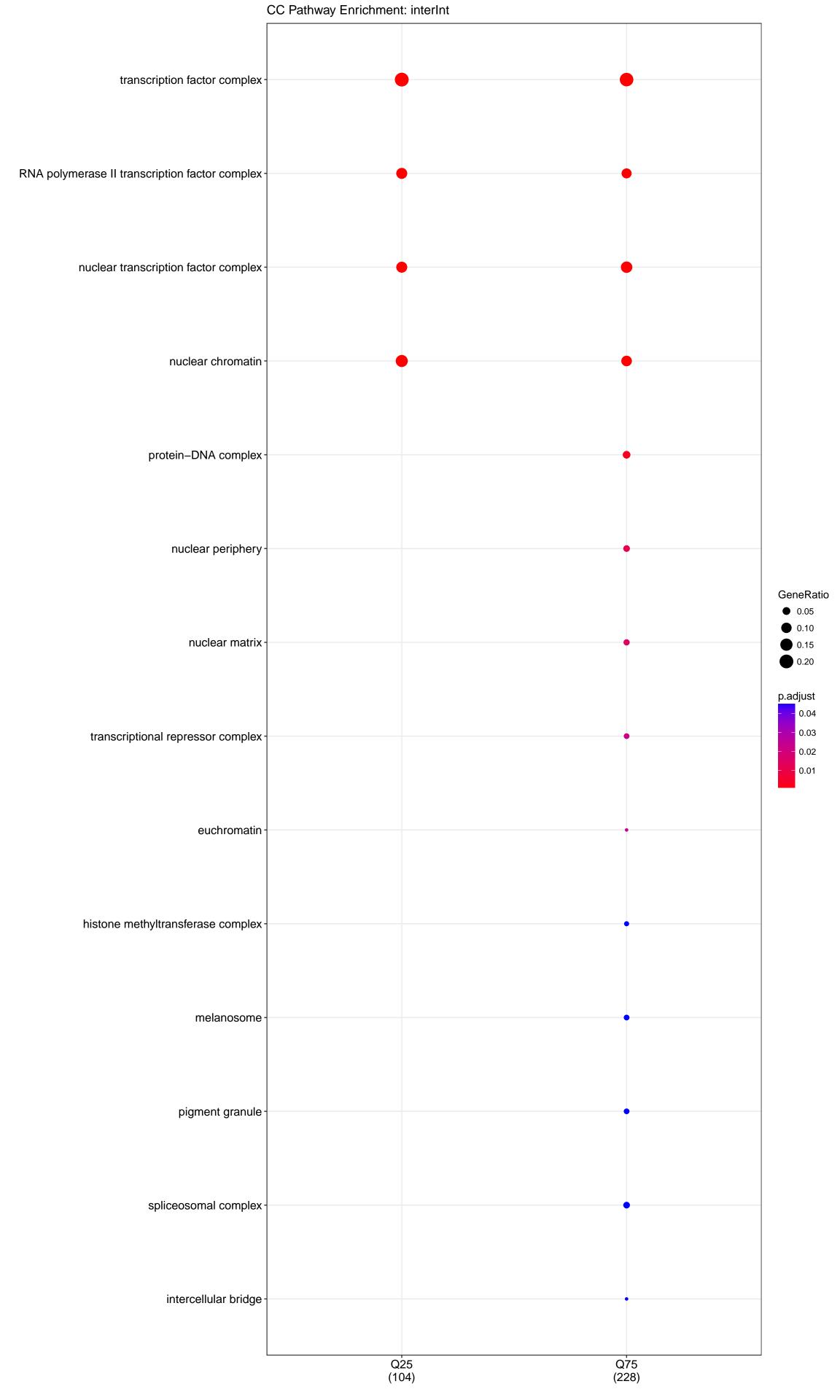
(142)(234) 0.04

0.03

0.02





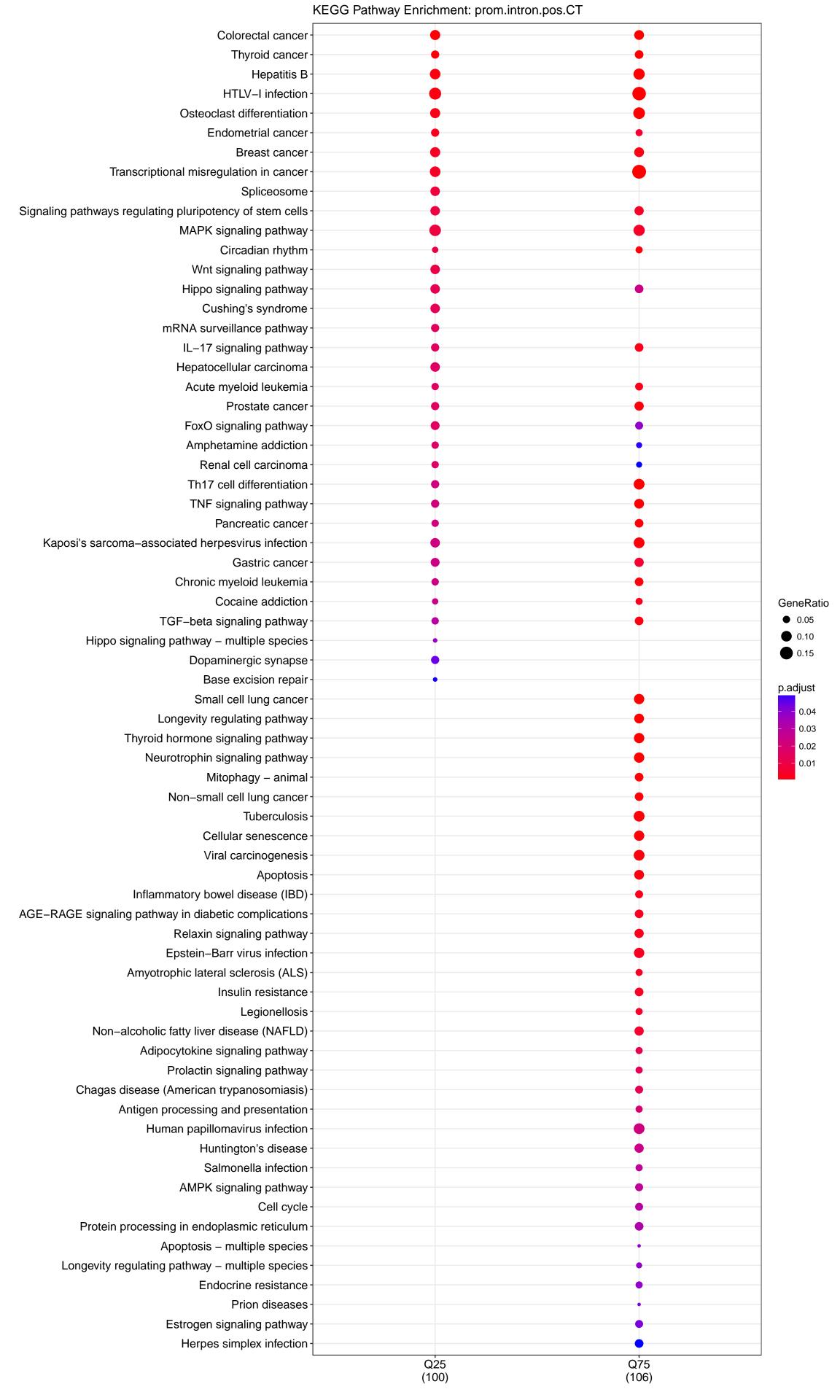


KEGG Pathway Enrichment: prom.intergenic.pos.CT HTLV-I infection Hepatitis B Mitophagy – animal Renal cell carcinoma Kaposi's sarcoma-associated herpesvirus infection Transcriptional misregulation in cancer IL–17 signaling pathway Cushing's syndrome Prostate cancer Osteoclast differentiation Th17 cell differentiation Wnt signaling pathway Breast cancer Colorectal cancer mRNA surveillance pathway Thyroid cancer Acute myeloid leukemia FoxO signaling pathway MAPK signaling pathway Prolactin signaling pathway Signaling pathways regulating pluripotency of stem cells Adherens junction Pancreatic cancer TNF signaling pathway Hippo signaling pathway Cellular senescence Hippo signaling pathway - multiple species **Endometrial cancer** Hepatocellular carcinoma Th1 and Th2 cell differentiation GeneRatio Longevity regulating pathway • 0.03 Chronic myeloid leukemia 0.06 Inflammatory bowel disease (IBD) 0.09 Neurotrophin signaling pathway Small cell lung cancer 0.15 Circadian rhythm p.adjust AGE-RAGE signaling pathway in diabetic complications TGF-beta signaling pathway 0.04 0.03 **Tuberculosis** 0.02 Thyroid hormone signaling pathway 0.01 Non-small cell lung cancer Relaxin signaling pathway Viral carcinogenesis Cocaine addiction **Apoptosis** Gastric cancer Epstein-Barr virus infection Chagas disease (American trypanosomiasis) PI3K-Akt signaling pathway Antigen processing and presentation Non-alcoholic fatty liver disease (NAFLD) Amyotrophic lateral sclerosis (ALS) AMPK signaling pathway Salmonella infection Legionellosis Cell cycle Protein processing in endoplasmic reticulum Endocrine resistance Longevity regulating pathway – multiple species Estrogen signaling pathway Prion diseases Herpes simplex infection Amphetamine addiction Adipocytokine signaling pathway B cell receptor signaling pathway Huntington's disease Platinum drug resistance Thyroid hormone synthesis Leishmaniasis cAMP signaling pathway Q75 (102) Q25 (102)

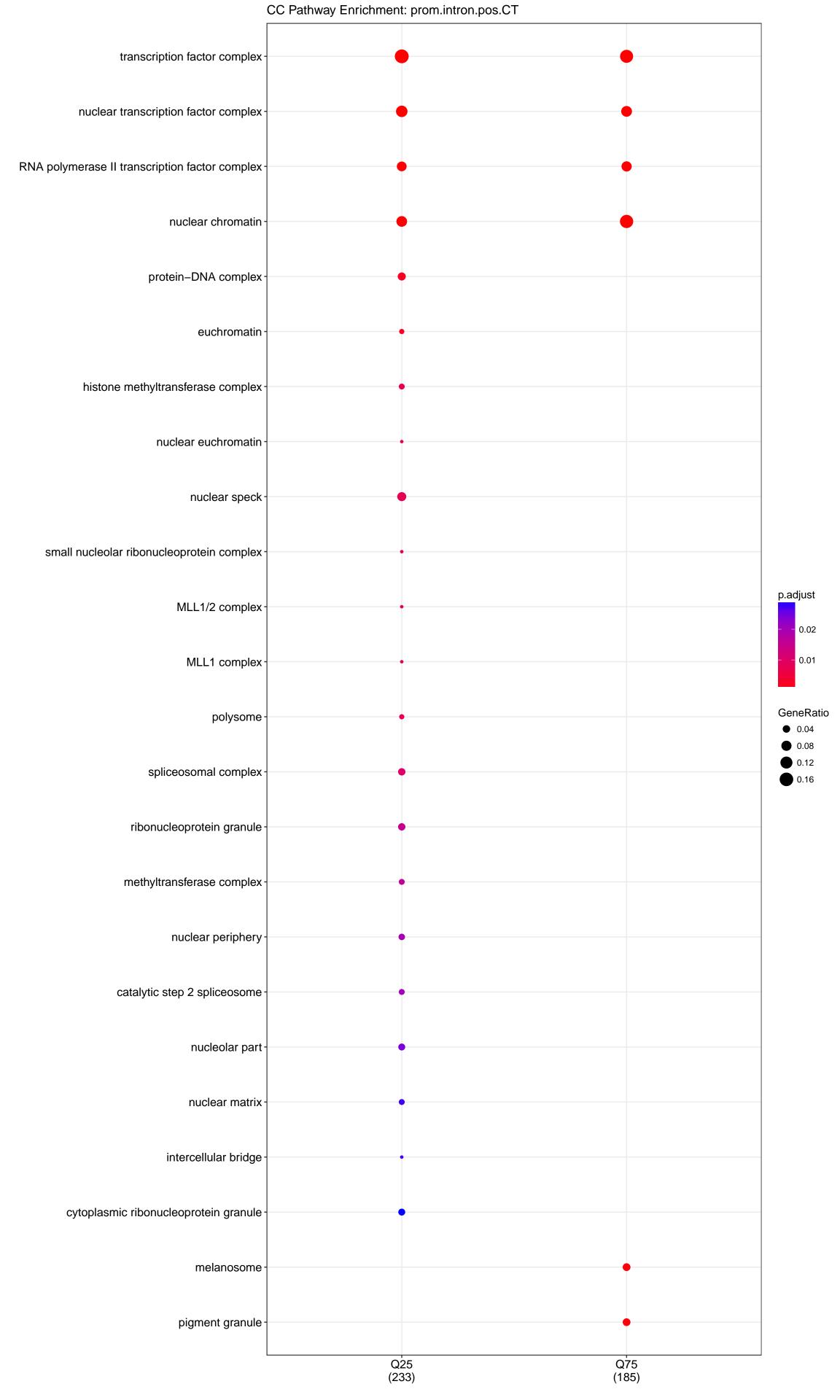
Q25 Q75 (235)(199)

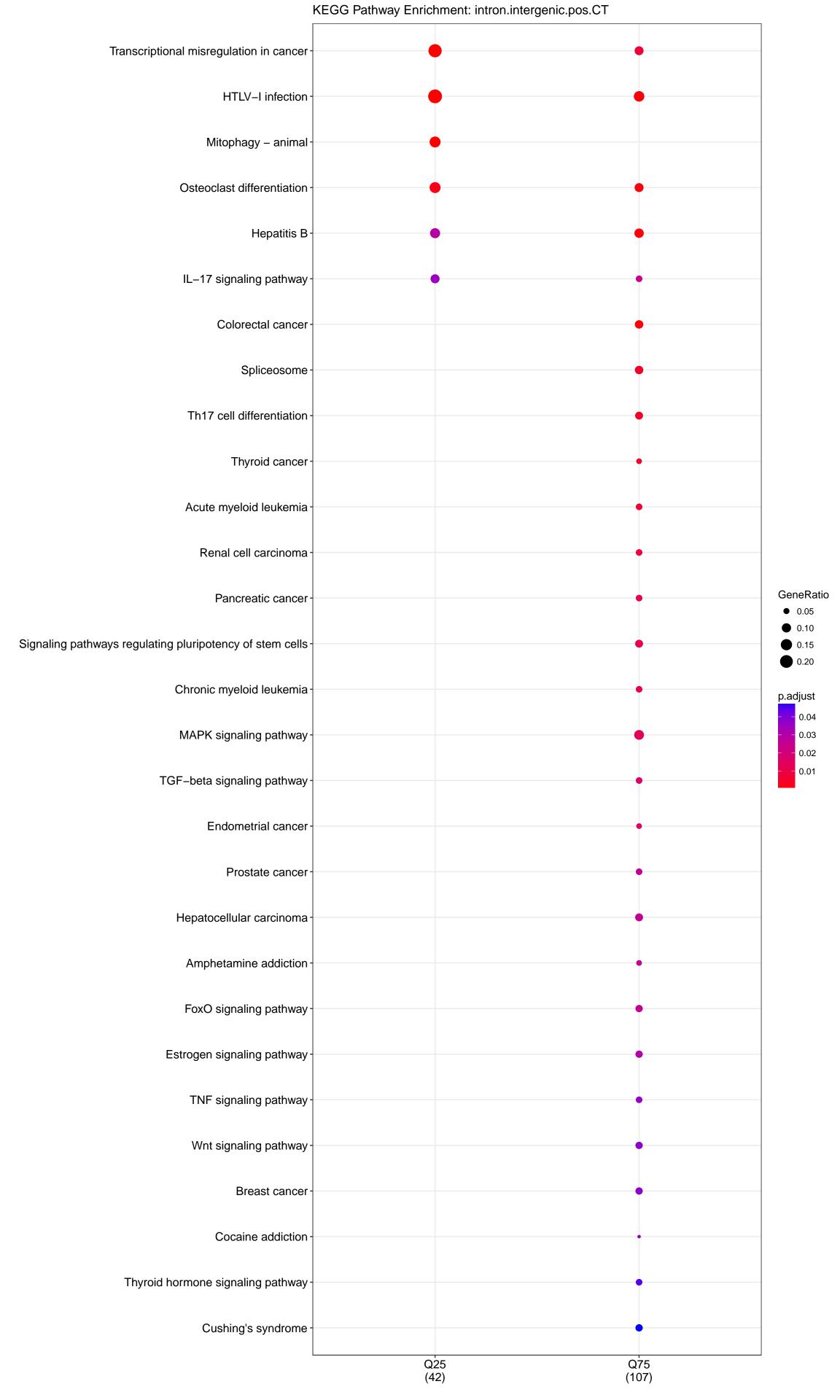
protein kinase B binding

CC Pathway Enrichment: prom.intergenic.pos.CT transcription factor complexnuclear transcription factor complex-RNA polymerase II transcription factor complex nuclear chromatin protein-DNA complexnuclear periphery GeneRatio 0.05 0.10 0.15 p.adjust small nucleolar ribonucleoprotein complex-0.02 0.01 polysome euchromatin ribonucleoprotein granule melanosome pigment granule histone methyltransferase complex Q25 (238) Q75 (198)

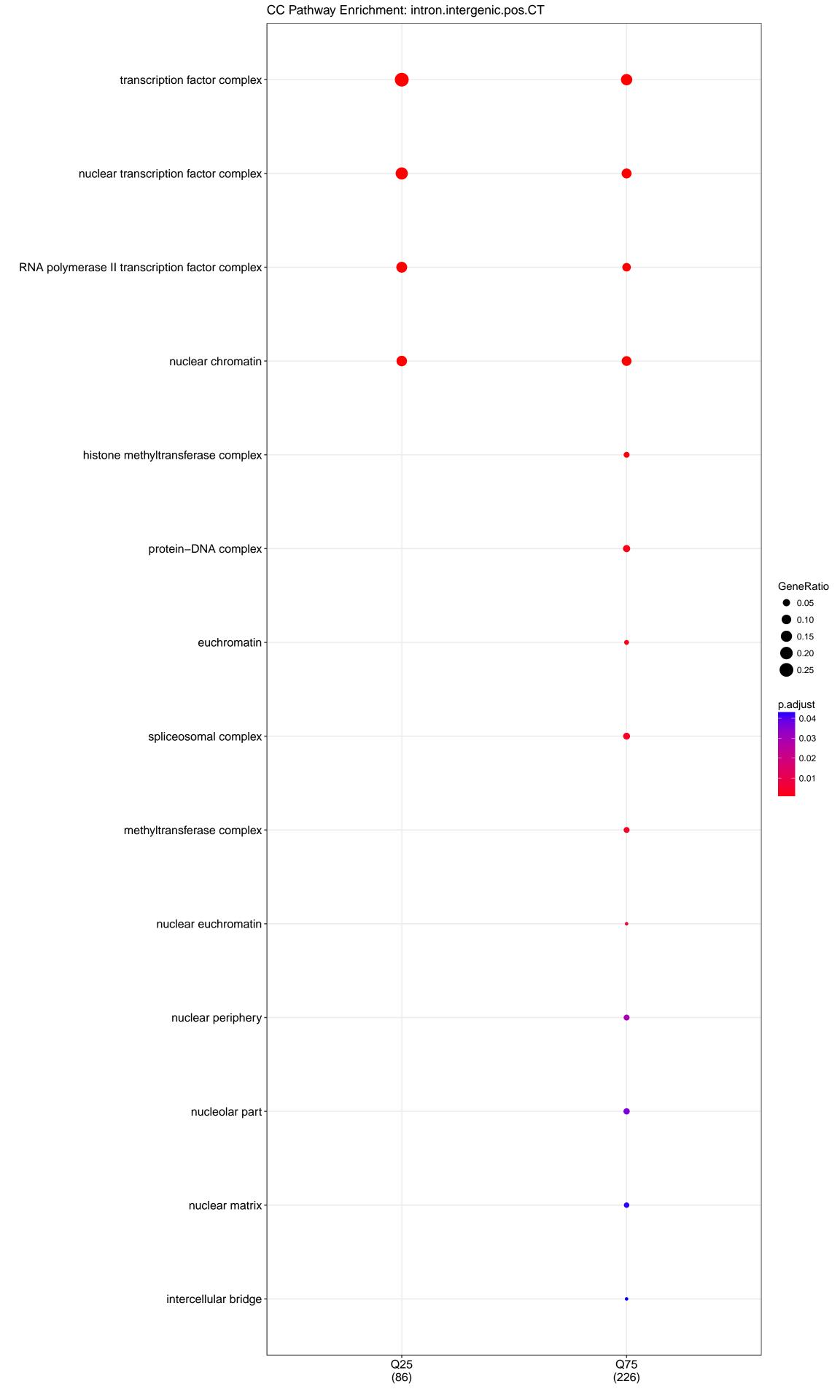


S100 protein binding Q25 Q75 (230)(186)











Q25

(228)

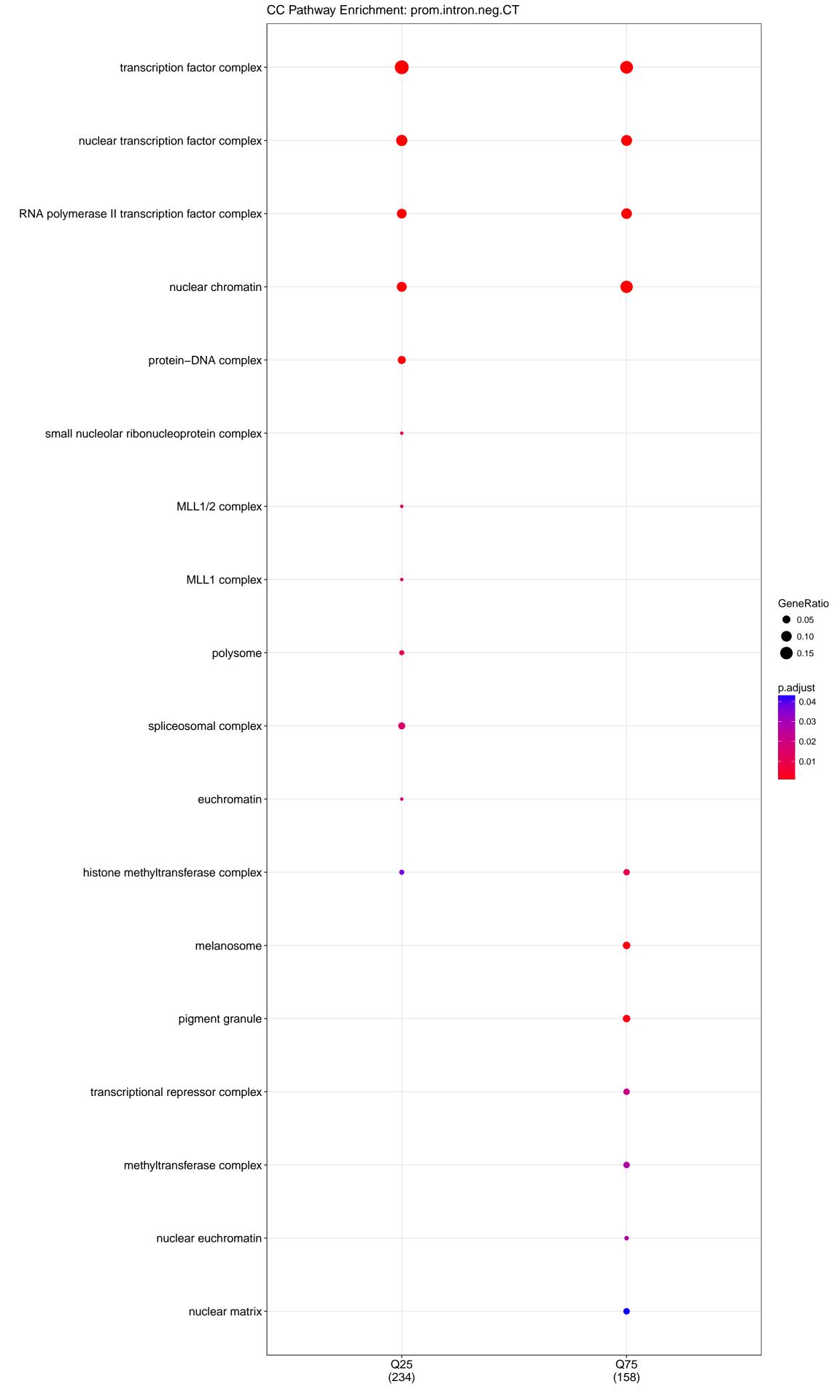
Q75

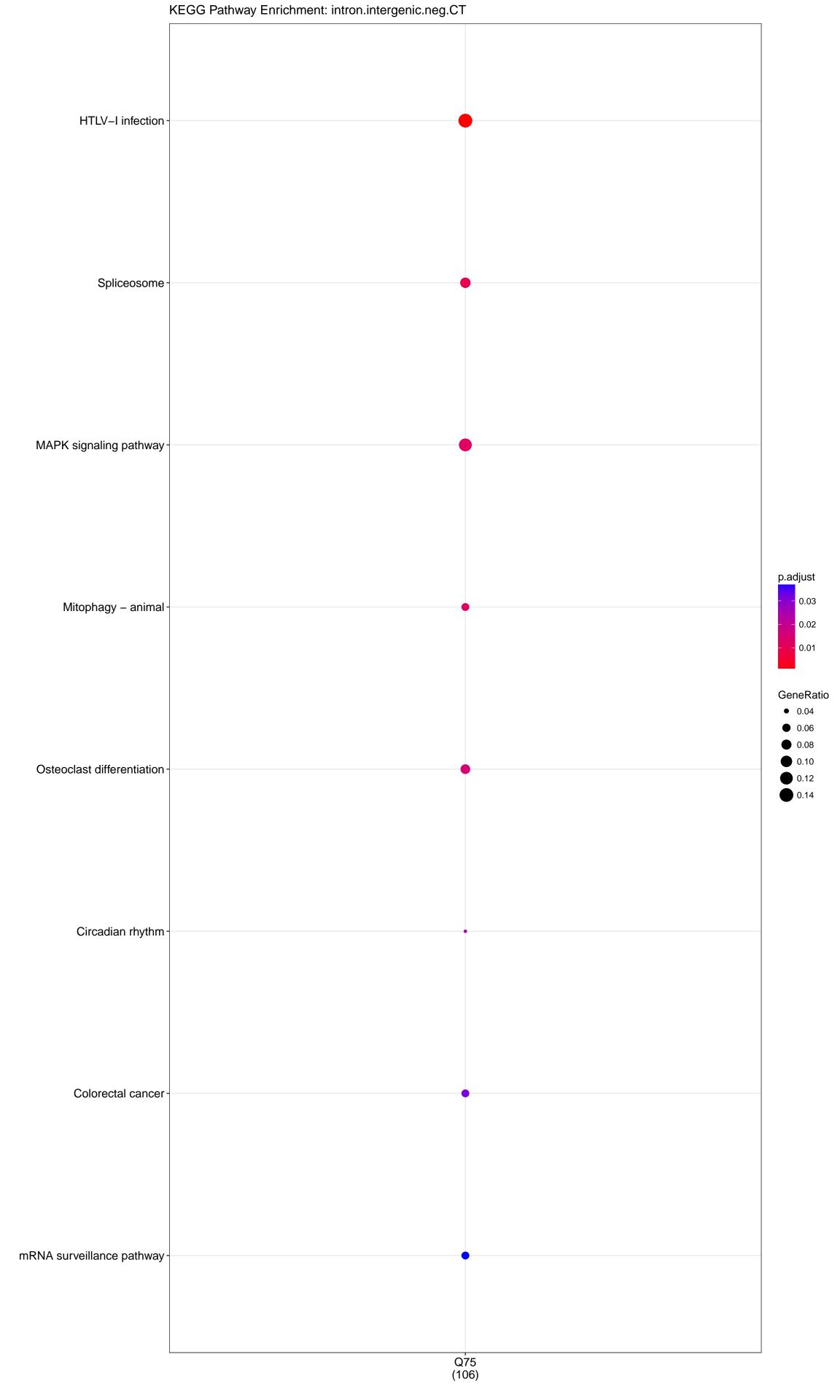
(205)

CC Pathway Enrichment: prom.intergenic.neg.CT transcription factor complexnuclear transcription factor complex RNA polymerase II transcription factor complex nuclear chromatin polysome protein-DNA complex-MLL1/2 complex -MLL1 complex spliceosomal complex ribonucleoprotein granule GeneRatio 0.05 0.10 0.15 histone methyltransferase complex p.adjust 0.04 cytoplasmic ribonucleoprotein granule 0.03 0.02 0.01 methyltransferase complexnucleolar partnuclear speck euchromatin fibrillar center nuclear periphery nuclear matrix melanosome pigment granule nuclear euchromatin Q25 (230) Q75 (203)











CC Pathway Enrichment: intron.intergenic.neg.CT transcription factor complexnuclear chromatin RNA polymerase II transcription factor complexnuclear transcription factor complex histone methyltransferase complex methyltransferase complex protein-DNA complex p.adjust 0.04 0.03 small nucleolar ribonucleoprotein complex 0.02 0.01 GeneRatio MLL1/2 complex • 0.1 MLL1 complex polysome euchromatin catalytic step 2 spliceosome spliceosomal complexnuclear speck ribonucleoprotein granule Q25 (16) Q75 (227)



Q25 Q75 (93)(196)

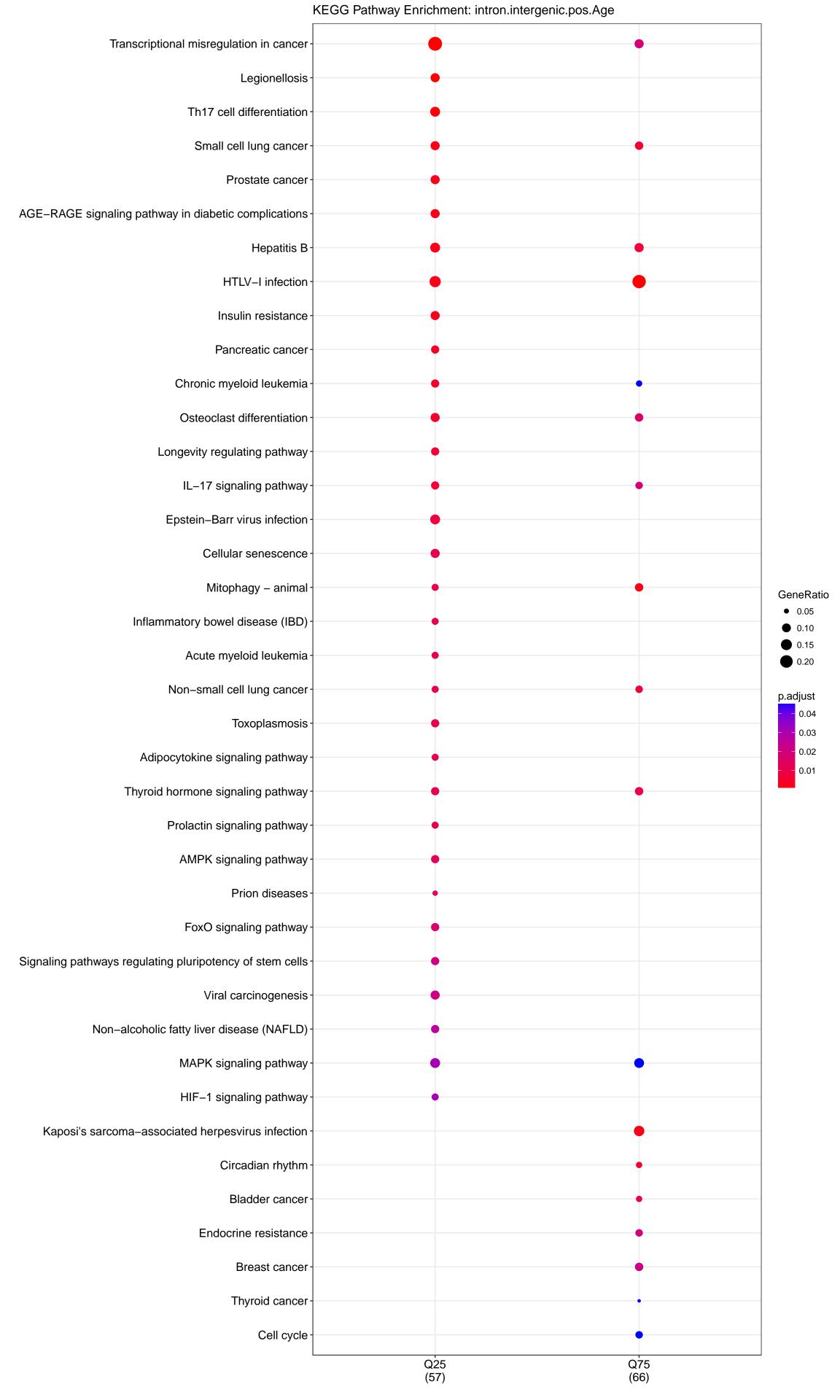
leucine zipper domain binding

CC Pathway Enrichment: prom.intergenic.pos.Age transcription factor complexnuclear chromatin RNA polymerase II transcription factor complexp.adjust nuclear transcription factor complex-0.010 0.005 GeneRatio • 0.05 0.10 melanosome pigment granule transcriptional repressor complexeuchromatin Q25 (94) Q75 (195)





CC Pathway Enrichment: prom.intron.pos.Age transcription factor complex-RNA polymerase II transcription factor complexnuclear chromatin nuclear transcription factor complex-GeneRatio • 0.05 0.10 nuclear euchromatinp.adjust 0.03 0.02 0.01 melanosome pigment granule transcriptional repressor complexeuchromatin Q25 (59) Q75 (196)





CC Pathway Enrichment: intron.intergenic.pos.Age transcription factor complex RNA polymerase II transcription factor complexnuclear transcription factor complexp.adjust 0.04 0.03 0.02 0.01 nuclear chromatin-GeneRatio 0.06 0.09 0.15 pigment granule histone methyltransferase complex Q25 (106) Q75 (126)

KEGG Pathway Enrichment: prom.intron.neg.Age Pancreatic cancer Hepatitis B Kaposi's sarcoma-associated herpesvirus infection Chronic myeloid leukemia Small cell lung cancer Prostate cancer Cellular senescence Th17 cell differentiation HTLV-I infection Prolactin signaling pathway Bladder cancer Endocrine resistance Transcriptional misregulation in cancer Inflammatory bowel disease (IBD) Osteoclast differentiation Acute myeloid leukemia Non-small cell lung cancer Human papillomavirus infection Glioma Melanoma Leishmaniasis Breast cancer Th1 and Th2 cell differentiation IL–17 signaling pathway AGE-RAGE signaling pathway in diabetic complications Toll-like receptor signaling pathway MicroRNAs in cancer Toxoplasmosis Viral carcinogenesis Cell cycle Legionellosis Hepatitis C Measles p.adjust Adipocytokine signaling pathway 0.04 B cell receptor signaling pathway 0.03 **Pertussis** 0.02 Influenza A 0.01 Salmonella infection MAPK signaling pathway Chemokine signaling pathway GeneRatio Herpes simplex infection **0**.1 HIF-1 signaling pathway 0.2 Antifolate resistance Chagas disease (American trypanosomiasis) Epstein-Barr virus infection T cell receptor signaling pathway Insulin resistance TNF signaling pathway-Relaxin signaling pathway **Apoptosis** Cocaine addiction Fluid shear stress and atherosclerosis Gastric cancer Cushing's syndrome Necroptosis · Cytosolic DNA-sensing pathway NOD-like receptor signaling pathway Hepatocellular carcinoma Mitophagy – animal Shigellosis Epithelial cell signaling in Helicobacter pylori infection RIG-I-like receptor signaling pathway **Tuberculosis** Thyroid hormone signaling pathway Thyroid cancer Circadian rhythm **Endometrial cancer** Colorectal cancer Prion diseases Neurotrophin signaling pathway Renal cell carcinoma Antigen processing and presentation Amyotrophic lateral sclerosis (ALS) TGF-beta signaling pathway AMPK signaling pathway Q75 Q25 (106)(27)



CC Pathway Enrichment: prom.intron.neg.Age nuclear chromatin transcription factor complex-RNA polymerase II transcription factor complexnuclear transcription factor complex protein-DNA complexheterochromatin MLL1/2 complex MLL1 complexnucleosome GeneRatio • 0.05 0.10 0.15 extrinsic component of organelle membrane 0.20 p.adjust 0.03 euchromatin 0.02 0.01 DNA packaging complex condensed chromosome, centromeric region nuclear heterochromatin melanosome pigment granule nuclear matrix fibrillar center nuclear periphery histone methyltransferase complex Q25 (53) Q75 (196)



(218)

(195)

0.03

0.02

0.01



CC Pathway Enrichment: prom.intergenic.pos.Int transcription factor complex nuclear transcription factor complex-RNA polymerase II transcription factor complexnuclear chromatin protein-DNA complex-GeneRatio • 0.05 0.10 nuclear periphery p.adjust 0.03 0.02 nuclear matrix 0.01 MLL1/2 complex -MLL1 complex histone methyltransferase complexnuclear euchromatin euchromatin Q25 (220) Q75 (195)



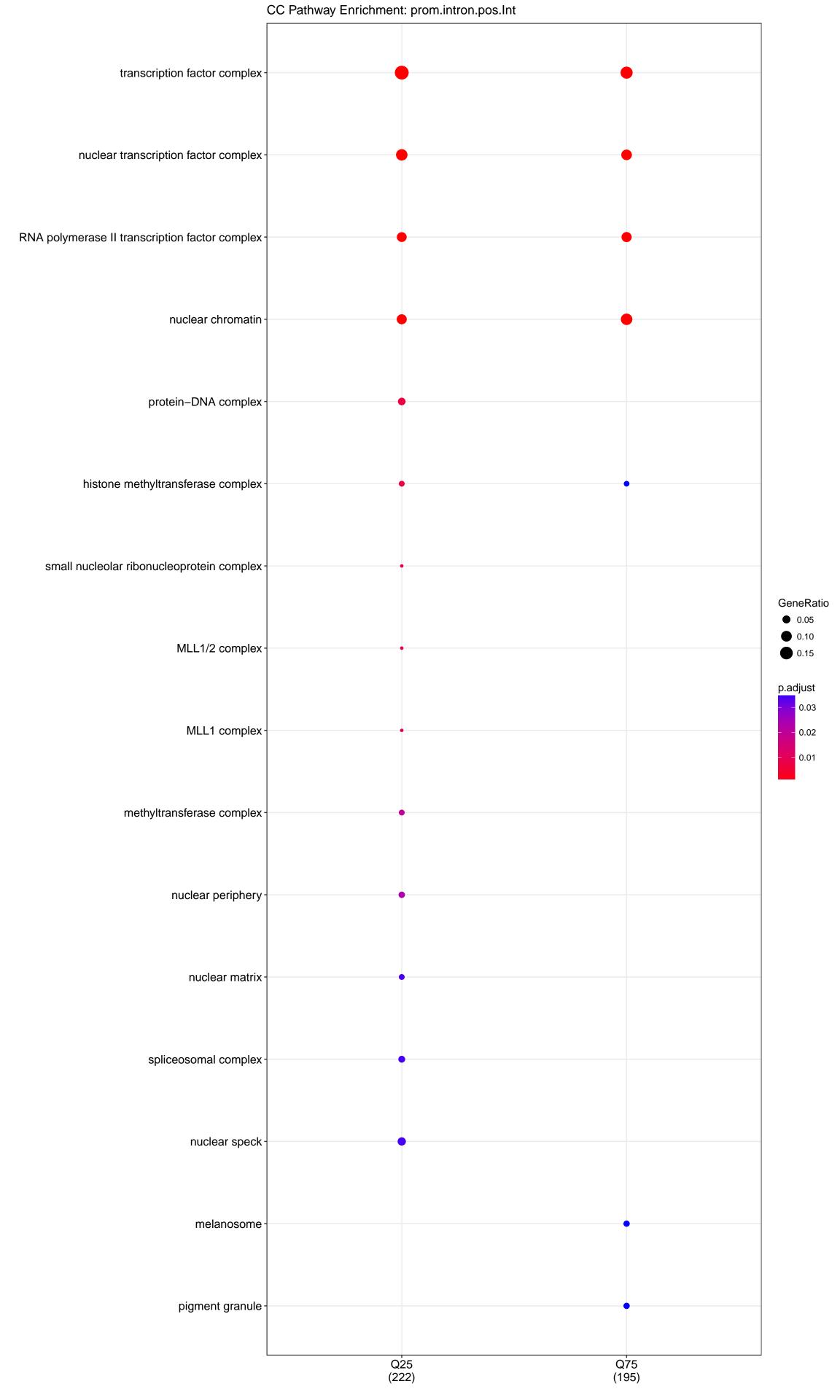


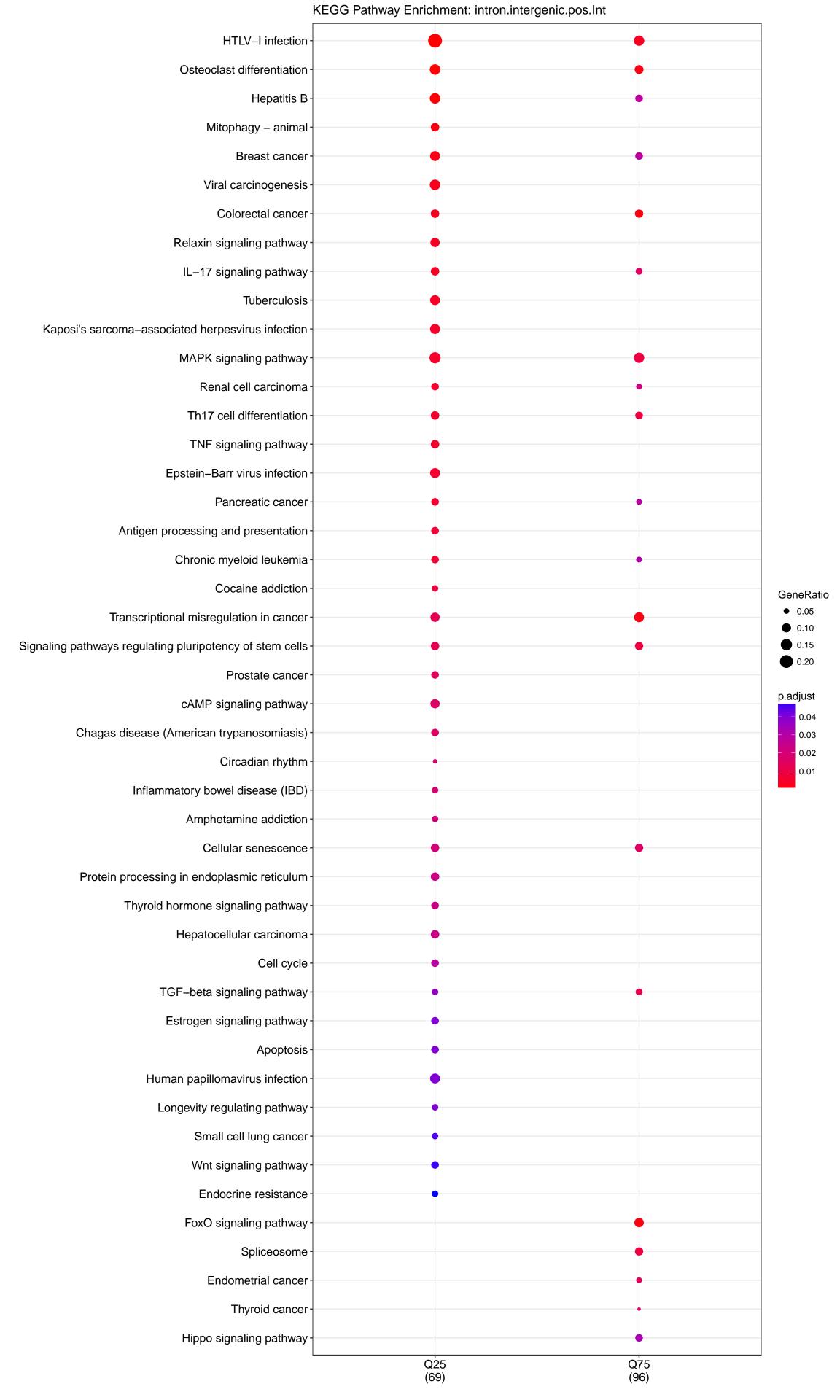
Q25

(220)

Q75

(196)







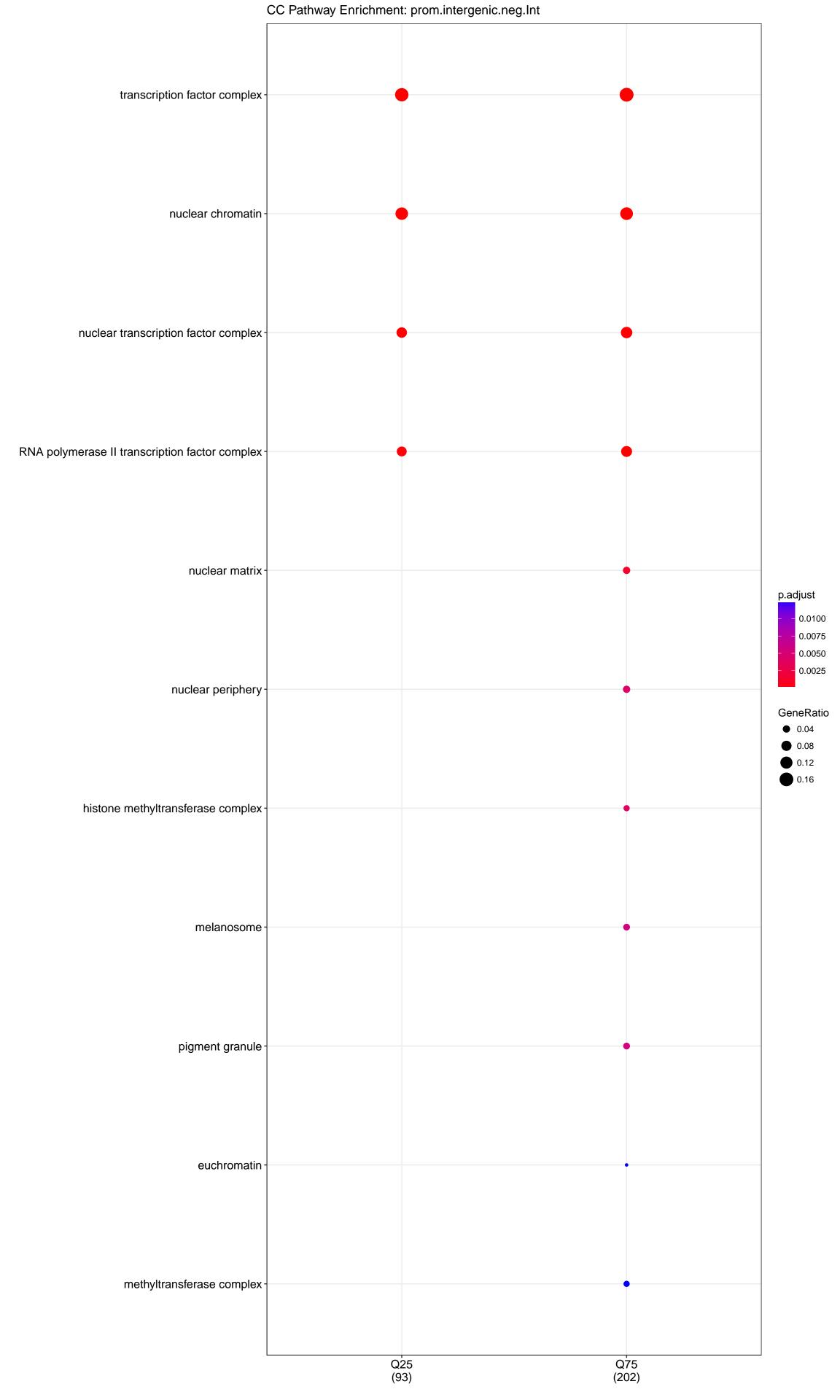
CC Pathway Enrichment: intron.intergenic.pos.Int transcription factor complex nuclear transcription factor complex RNA polymerase II transcription factor complex nuclear chromatin protein-DNA complex transcriptional repressor complexnuclear euchromatin melanosome GeneRatio 0.05 pigment granule histone methyltransferase complexp.adjust 0.04 0.03 0.02 euchromatin 0.01 methyltransferase complexnuclear exosome (RNase complex) small nucleolar ribonucleoprotein complex MLL1/2 complex MLL1 complex spliceosomal complex catalytic step 2 spliceosome nuclear speck Q25 (116) Q<sup>7</sup>5 (221)



Q25

(90)

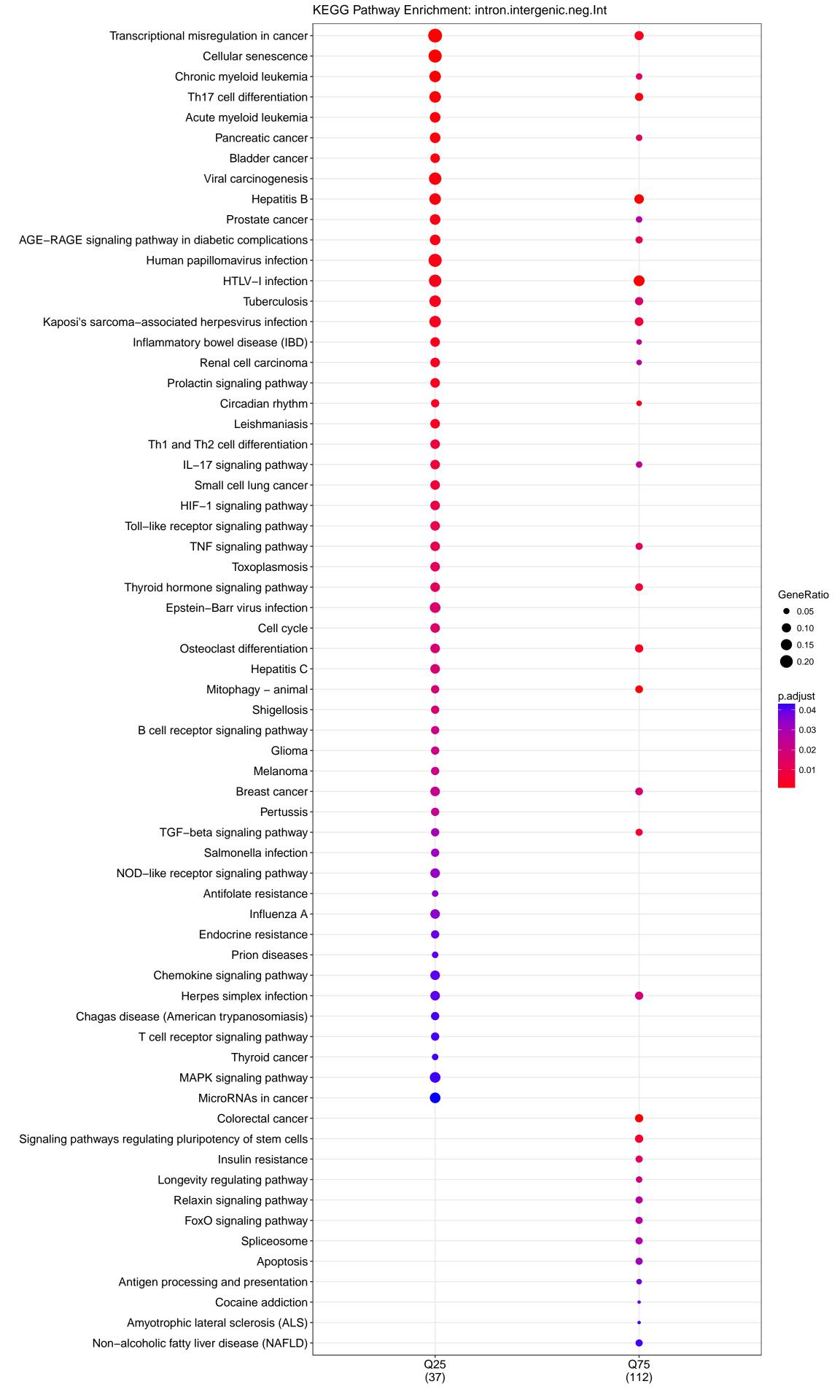
Q75 (204)







CC Pathway Enrichment: prom.intron.neg.Int transcription factor complex-RNA polymerase II transcription factor complexnuclear transcription factor complexnuclear chromatin protein-DNA complex histone methyltransferase complex euchromatin p.adjust 0.03 0.02 transcriptional repressor complex 0.01 GeneRatio • 0.04 methyltransferase complex 0.08 0.16 intercellular bridge PML body nuclear exosome (RNase complex) nuclear matrix melanosome pigment granule nuclear periphery Q75 (207) Q25 (108)





CC Pathway Enrichment: intron.intergenic.neg.Int transcription factor complexnuclear chromatin nuclear transcription factor complex-RNA polymerase II transcription factor complexhistone methyltransferase complex methyltransferase complexmelanosome p.adjust pigment granule 0.04 0.03 0.02 0.01 MLL1/2 complex -GeneRatio 0.04 0.08 MLL1 complex 0.16 fibrillar center nuclear matrix transcriptional repressor complex nuclear speck nuclear euchromatin nuclear periphery nucleolar part-Q25 (80) Q75 (197)