Single CpG KEGG Pathway enrichment by Age Axon guidance -Focal adhesion Pathways in cancer Rap1 signaling pathway MAPK signaling pathway Sphingolipid signaling pathway Ras signaling pathway Human papillomavirus infection Bacterial invasion of epithelial cells-Proteoglycans in cancer-Regulation of actin cytoskeleton Glutamatergic synapse Hippo signaling pathway Adherens junction Arrhythmogenic right ventricular cardiomyopathy (ARVC) Neurotrophin signaling pathway Wnt signaling pathway Relaxin signaling pathway Thyroid hormone signaling pathway Phospholipase D signaling pathway Breast cancer Melanogenesis -ErbB signaling pathway Morphine addiction p.adjust Hepatocellular carcinoma-0.04 Inflammatory mediator regulation of TRP channels -0.03 Signaling pathways regulating pluripotency of stem cells-0.02 Calcium signaling pathway 0.01 HTLV-I infection GeneRatio AGE-RAGE signaling pathway in diabetic complications -• 0.02 EGFR tyrosine kinase inhibitor resistance -0.04 Adrenergic signaling in cardiomyocytes -0.06 Insulin secretion -Dilated cardiomyopathy (DCM) -Endocrine resistance -Circadian entrainment Hypertrophic cardiomyopathy (HCM) -Gap junction -GABAergic synapse -Hedgehog signaling pathway Endocrine and other factor-regulated calcium reabsorption-Insulin signaling pathway Tight junction -Vascular smooth muscle contraction -Lysine degradation -VEGF signaling pathway Pancreatic secretion -Serotonergic synapse-Platelet activation -Endocytosis -Apelin signaling pathway Fat digestion and absorption -Oxytocin signaling pathway-Ether lipid metabolism -Linoleic acid metabolism alpha-Linolenic acid metabolism ÁII (5508) GenesPlusPromoters (5231) Promoters (1098) Genes (5088)

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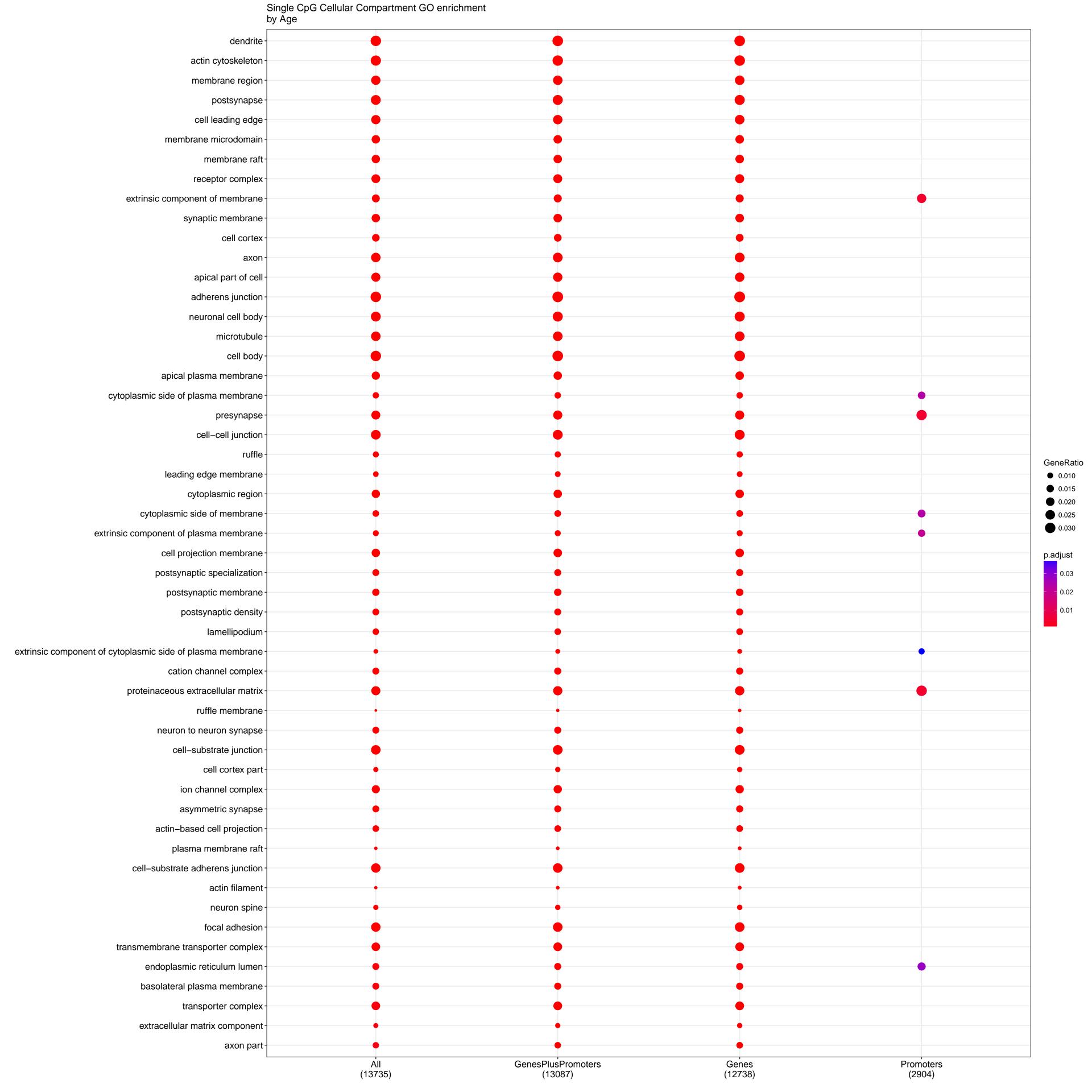
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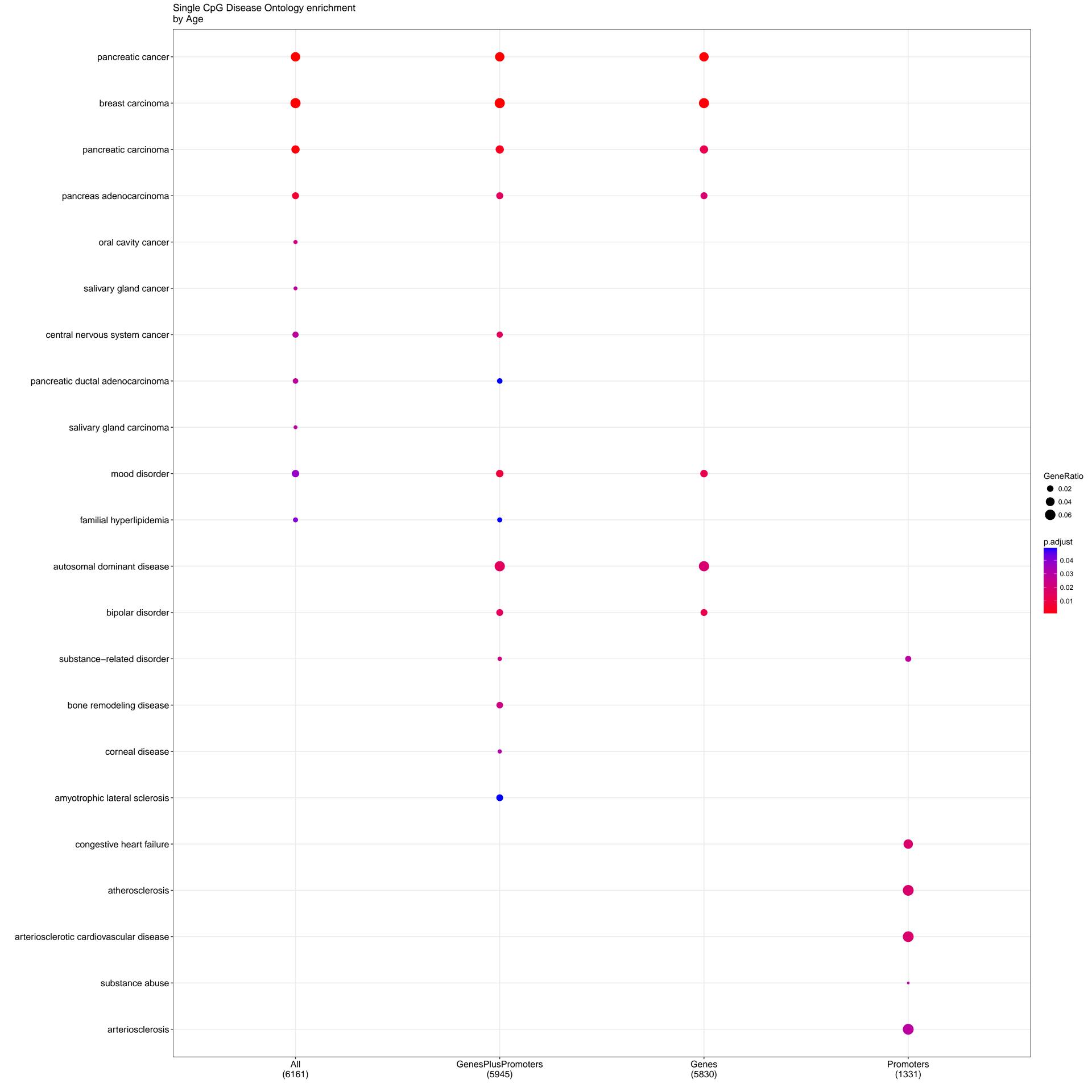
Single CpG Molecular Function GO enrichment by Age metal ion transmembrane transporter activity actin binding phosphatase binding protein serine/threonine kinase activity gated channel activity protein tyrosine kinase activity phospholipid binding ion channel activity calmodulin binding cation channel activity signal transducer, downstream of receptor, with serine/threonine kinase activity substrate-specific channel activity sodium ion transmembrane transporter activity active transmembrane transporter activity Ras guanyl-nucleotide exchange factor activity protein phosphatase binding transmembrane receptor protein kinase activity cell adhesion molecule binding magnesium ion binding actin filament binding passive transmembrane transporter activity channel activity secondary active transmembrane transporter activity phosphatidylinositol binding protein phosphorylated amino acid binding cofactor binding potassium ion transmembrane transporter activity beta-catenin binding SH3 domain binding RNA polymerase II transcription factor binding tubulin binding monovalent inorganic cation transmembrane transporter activity p.adjust signal transducer activity, downstream of receptor guanyl-nucleotide exchange factor activity inorganic anion transmembrane transporter activity phosphatidylinositol 3-kinase activity phospholipid transporter activity phosphatidylinositol phosphate binding GeneRatio transmembrane receptor protein tyrosine kinase activity • 0.01 microtubule binding 0.02 anion transmembrane transporter activity 0.03 coenzyme binding phosphotyrosine bindingphosphatidylinositol bisphosphate kinase activity glycoprotein bindingextracellular ligand-gated ion channel activity glycosaminoglycan bindingphosphatidylinositol-4,5-bisphosphate 3-kinase activity GTPase binding phosphoric ester hydrolase activity small GTPase binding growth factor bindingtranscription factor activity, RNA polymerase II core promoter proximal region sequence-specific bindinglipase activity divalent inorganic cation transmembrane transporter activity ligand-gated ion channel activity ligand-gated channel activity voltage-gated ion channel activity voltage-gated channel activity sulfur compound 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 neuropeptide receptor bindingstructural constituent of cytoskeleton heparin binding phospholipase A2 activity hormone activity neuropeptide hormone activity ammonium ion binding transcriptional activator activity, RNA polymerase II core promoter proximal region sequence-specific binding transcriptional activator activity, RNA polymerase II transcription regulatory region sequence-specific binding amino acid transmembrane transporter activity Promoters (2735) GenesPlusPromoters Genes (12034)(12972)(12363)

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