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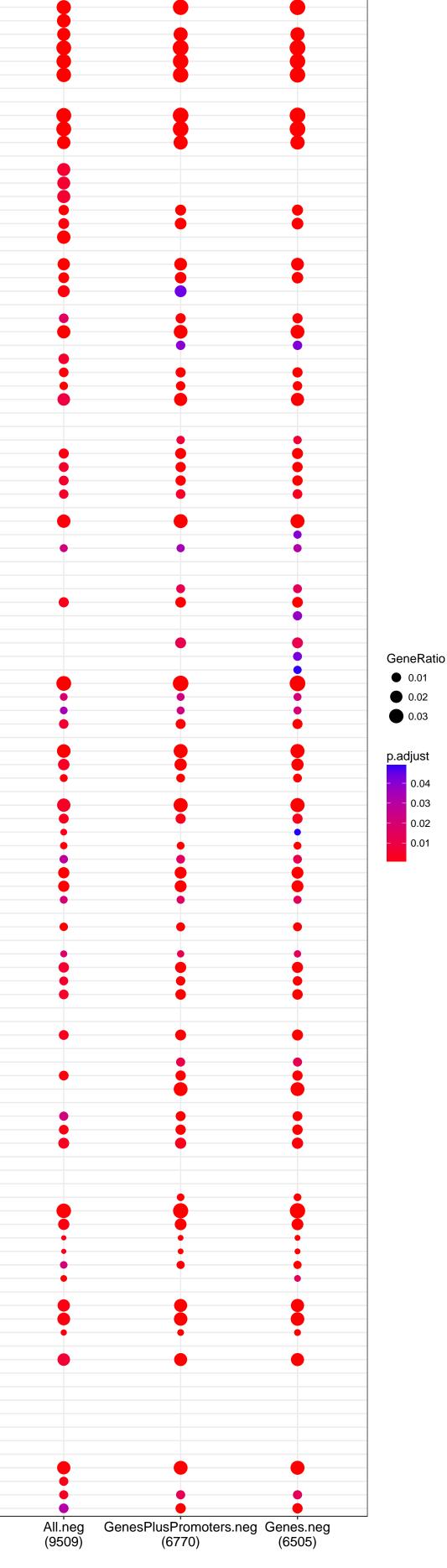
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non-CpG Cellular Compartment GO Enrichment by Cell Type membrane microdomain membrane raft apical part of cell membrane region cell-cell junction apical plasma membrane actin cytoskeleton microtubule axon cell-cell adherens junction proteinaceous extracellular matrix cell leading edge receptor complex plasma membrane raft neuronal cell body leading edge membrane transmembrane transporter complex cell projection membrane cell-cell contact zone microvillus extrinsic component of membrane actomyosin sarcolemma acrosomal vesicle cell cortex cytoplasmic side of membrane transporter complex caveola cytoplasmic side of plasma membrane ion channel complex centrosome plasma membrane protein complexextrinsic component of cytoplasmic side of plasma membrane p.adjust cell body spindle plasma membrane receptor complex 0.03 ciliary part 0.02 synaptic membrane 0.01 adherens junction potassium channel complex GeneRatio stress fiber contractile actin filament bundle • 0.01 0.02 actin-based cell projection 0.03 cornified envelope contractile fiber dendrite presynapse brush border cluster of actin-based cell projections extrinsic component of plasma membrane sarcomere contractile fiber part cytoplasmic region I band lamellipodium collagen trimer extracellular matrix component Z disc postsynapse actin filament anchored component of membrane specific granule basolateral plasma membrane platelet alpha granule platelet alpha granule lumen side of membrane basement membrane brush border membrane Golgi lumen photoreceptor outer segment keratin filament intermediate filament intermediate filament cytoskeleton external side of plasma membrane plasma lipoprotein particle lipoprotein particle protein-lipid complex high-density lipoprotein particle ÁII (15493) GenesPlusPromoters (13595) Promoters (5135) Genes (13077)

non-CpG Disease Ontology Enrichment by Cell Type pancreatic cancer breast carcinoma central nervous system cancer female reproductive organ cancer overnutrition nutrition disease pancreatic carcinoma obesity organ system benign neoplasm pulmonary hypertension arteriosclerotic cardiovascular disease atherosclerosis osteoarthritis pre-eclampsia cell type benign neoplasm adenoma ovarian cancer arteriosclerosis myocardial infarction mood disorder biliary tract cancer urinary system disease meningioma malignant ovarian surface epithelial-stromal neoplasm p.adjust ovary epithelial cancer 0.04 ovarian carcinoma 0.03 kidney disease 0.02 0.01 coronary artery disease osteoporosis GeneRatio head and neck cancer • 0.02 bone remodeling disease 0.04 chronic obstructive pulmonary disease 0.08 head and neck carcinoma lung disease skin disease large intestine cancer colorectal cancer cardiomyopathy bone resorption disease integumentary system disease familial hyperlipidemia blood coagulation disease prostate carcinoma liver cirrhosis cerebrovascular disease obstructive lung disease congestive heart failure lipid metabolism disorder leiomyoma dermatitis atopic dermatitis mouth disease malignant mesothelioma type 2 diabetes mellitus parasitic protozoa infectious disease brain infarction GenesPlusPromoters (6156) ÁII (6825) Genes (5972) Promoters (2532)

non-CpG KEGG Pathway Enrichment by Cell Type Pathways in cancer Human papillomavirus infection -Rap1 signaling pathway -Focal adhesion -PI3K-Akt signaling pathway Relaxin signaling pathway-Breast cancer-Small cell lung cancer-Axon guidancecAMP signaling pathway Tight junction -Hepatocellular carcinoma-Amoebiasis -Cell cycle-IL-17 signaling pathway -Kaposi's sarcoma-associated herpesvirus infection-ECM-receptor interaction -Prolactin signaling pathway Hepatitis C Signaling pathways regulating pluripotency of stem cells -AGE-RAGE signaling pathway in diabetic complications -HTLV-I infection -Sphingolipid signaling pathway Hippo signaling pathway -Neuroactive ligand-receptor interaction-Regulation of lipolysis in adipocytes -Regulation of actin cytoskeleton-Proteoglycans in cancer-Ras signaling pathway -NOD-like receptor signaling pathway-Platelet activation -Basal cell carcinoma-Leukocyte transendothelial migration -Apoptosis -Adherens junction -Colorectal cancer Phospholipase D signaling pathway Bile secretion -HIF-1 signaling pathway -Tyrosine metabolism -Hepatitis B Wnt signaling pathway p.adjust Adipocytokine signaling pathway-Complement and coagulation cascades -0.04 Thyroid hormone signaling pathway-0.03 Cytokine-cytokine receptor interaction-Gap junction -0.02 Inflammatory mediator regulation of TRP channels -0.01 Calcium signaling pathway-Glutamatergic synapse-Circadian entrainment GeneRatio Pancreatic secretion -0.02 Jak-STAT signaling pathway-0.04 Bacterial invasion of epithelial cells -Melanoma-0.06 Insulin secretion -Adrenergic signaling in cardiomyocytes Hypertrophic cardiomyopathy (HCM) Melanogenesis -Morphine addiction -TNF signaling pathway PPAR signaling pathway Choline metabolism in cancer-Salivary secretion -Protein digestion and absorption -Dilated cardiomyopathy (DCM) cGMP-PKG signaling pathway-EGFR tyrosine kinase inhibitor resistance Endocrine resistance -AMPK signaling pathway -Cholinergic synapse Thyroid cancer-Hedgehog signaling pathway Gastric acid secretion -Non-small cell lung cancer-Cell adhesion molecules (CAMs) -Arrhythmogenic right ventricular cardiomyopathy (ARVC) -Vascular smooth muscle contraction -Tryptophan metabolism-Histidine metabolism -Glycerolipid metabolism -Aldosterone synthesis and secretion-Phosphatidylinositol signaling system-Prostate cancer-Fc epsilon RI signaling pathway Fat digestion and absorption-Hematopoietic cell lineage GABAergic synapse MAPK signaling pathway -Dopaminergic synapse -Apelin signaling pathway -Oxytocin signaling pathway Linoleic acid metabolism -Ether lipid metabolism -Fc gamma R-mediated phagocytosis -Central carbon metabolism in cancer All.pos (6137) GenesPlusPromoters.pos All.neg (4027) Genes.pos Promoters.pos GenesPlusPromoters.neg Genes.neg (4969)(5211) (2018)(2864)(2749)

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non-CpG Disease Ontology Enrichment by Cell Type central nervous system cancer breast carcinoma pancreatic cancer overnutrition nutrition disease organ system benign neoplasm female reproductive organ cancer obesity pre-eclampsia arteriosclerotic cardiovascular disease atherosclerosis myocardial infarction arteriosclerosis mood disorder osteoarthritis adenoma urinary system disease ovarian cancer pancreatic carcinoma coronary artery disease biliary tract cancer meningioma pulmonary hypertension cell type benign neoplasm p.adjust head and neck cancer 0.04 chronic obstructive pulmonary disease 0.03 kidney disease 0.02 lung disease 0.01 head and neck carcinoma malignant ovarian surface epithelial-stromal neoplasm GeneRatio • 0.02 osteoporosis 0.04 skin disease 0.06 0.08 bipolar disorder integumentary system disease bone remodeling disease bone resorption disease blood coagulation diseasefamilial hyperlipidemia prostate carcinoma cardiomyopathy obstructive lung disease intrinsic cardiomyopathy cerebrovascular disease liver cirrhosis musculoskeletal system cancer lipid metabolism disorder congestive heart failure dermatitis malignant mesothelioma glomerulosclerosis focal segmental glomerulosclerosis essential hypertension mouth disease atopic dermatitis parasitic protozoa infectious disease type 2 diabetes mellitus tooth disease All.pos (6747) GenesPlusPromoters.pos (5962) Genes.neg (3261) Genes.pos (5783) Promoters.pos (2426) All.neg (4663)