100 bases hg19 Scale 28,544,700 28,544,800 28,544,950 chr13: 28,544,850 28,544,900 28,544,750 UCSC Genes (RefSeq, GenBank, CCDS, Rfam, tRNAs & Comparative Genomics) lincRNA and TUCP transcripts
s, scaRNAs, and microRNAs from snoRNABase and miRBase CTR147 CpG merge methylation level CTR147 ▁▐▃ CTR149 CpG merge methylation level CTR149 L Ŀ CTR150 CTR151 CpG merge methylation level CTR151 CTR152 CpG merge methylation level CTR153 CpG merge methylation level CTR152 CTR153 . ∎L CTR154 CpG merge methylation level CTR154 CTR84 CpG merge methylation level CTR84 CTR85 CpG merge methylation level CTR85 L CTR86 CpG merge methylation level CTR86 CTR97 CTR98 CpG merge methylation level CTR98 CTR101 CpG merge methylation level CTR101 ۱ _____ TR103 CpG merge methylation level CTR103 CTR104 CpG merge methylation level CTR104 1 CTR106 CpG merge methylation level CTR106 I CTR107 CpG merge methylation level CTR107 CTR108 CpG merge methylation level CTR108 CTR110 CpG merge methylation level CTR132 CpG merge methylation level CTR110 CTR132 .. CTR134 CpG merge methylation level CTR134 CTR148 CpG merge methylation level CTR148 CTR111 CpG merge methylation level CTR111 CTR113 CpG merge methylation leve CTR113 ++ CTR114 CpG mer CTR114 CTR117 CpG merge methylation level CTR117 CTR118 CpG merge methylation level CTR118 CTR126 CpG merge methylation level CTR126 CTR127 CpG merge methylation level CTR127 CTR128 CpG merge methylation level CTR128 CTR129 CpG merge methylation level CTR129 CTR131 CpG merge methylation level CTR131 UCSD Adipose Tissue Bisulfite-Seg Donor STL003 EA Release 9 AT BS 03 BI Adult Liver Bisulfite-Seq Donor 3 Library WGBS_Lib 11 EA Releas AL BS 3 11 UCSD Aorta Bisulfite-Seq Donor STL003 EA Re Aorta BS 03 UCSD Esophagus Bisulfite-Seq Donor STL003 EA Release 9 Esophagus BS 03 BI Fetal Muscle Leg Bisulfite-Seg Donor UW H24996 Library WGBS_Lib 66 EA R FML BS 96 66 BI Fetal Thymus Bisulfite-Seq Donor UW H24943 Library WGBS_Lib 65 EA Release 9 FT BS 43 65 UCSD Gastric Bisulfite-Seq Donor STL003 EA Release 9 Gastric BS 03 UCSD Left Ventricle Bisulfite-Seq Donor STL001 EA Release LV BS 01 UCSD Left Ventricle Bisulfite-Seq Donor STL003 EA Release 9 LV BS 03 UCSD Lung Bisulfite-Seq Donor STL002 EA Release 9 Lung BS 02 UCSD Ovary Bisulfite-Seq Donor STL002 EA Release 9 Ovary BS 02 Pancreas BS 03 UCSD Psoas Muscle Bisulfite-Seq Donor STL003 EA Release 9 PM BS 03 UCSD Right Atrium Bisulfite-Seq Donor STL003 EA Release 9 RA BS 03 Ι. UCSD Right Ventricle Bisulfite-Seq Donor STL003 EA Release 9 **RV BS 03** UCSD Sigmoid Colon Bisulfite-Seq Donor STL001 EA Release 9 SC BS 01 UCSD Sigmoid Colon Bisulfite-Seq Donor STL003 EA Release 9 SC BS 03 . . . UCSD Small Intestine Bisulfite-S Seq Donor STL001 EA Release 9 SI BS 01 ... I ... UCSD Spleen Bisulfite-Seq Donor STL003 EA Release 9 Spleen BS 03 STL001 EA Release 9 Thymus BS 01 ı I s DNA methylation in brain tissue (bigWig) Brain Methyl 2 DNA methylation in kidney tissue (bigWig) Kidney Methyl 2 DNA methylation in placenta (biological replicate 1) (bigWig) Placenta1 Methyl 2 DNA methylation in placenta (biological replicate 2) (bigWig) Placenta2 Methyl 2 11 11 11 ı DNA methylation in plac ita (biological replicate 3) (bigWig) Placenta3 Methyl 2 I I I i II I ı J 1 Cerebellum Human_Kidney_Meth Kidney Human_NKcells_Meth NKcells Human_Sperm_Meth Sperm NormalPancreas1 Human_NormalPancreas2_Meth NormalPancreas2 Human_93A_Meth Human_93N_Meth 93N Human_Epidermis-old-sun-exposed_Meth Epidermis-old-sun-e Human_Epidermis-old-sun-protected_Meth Human_Epidermis-young-sun-exposed_Meth Epidermis-young-sun-Human_Epidermis-young-sun-protected_Meth Epidermis-young-sun Human_Buccals_Meth Buccals Human_Sperm_Meth Sperm Human_BloodHealthy_Meth BloodHealthy Distinct Human DNA Methylomes from Different Ages, Heyn 2012: Human_CD4T-100yr_Meth Distinct Human DNA Methylomes from Different Ages, Heyn 2012 : Human_CD4T-Newborn_Meth CD4T-Newborn Distinct Human DNA Methylomes from Different Ages, Heyn 2012: Human_PBMC_Meth РВМС Changes in Human Hematopoietic Stem Cells, Hodges 2011: Human_CD133HSC_Meth CD133HSC Roadmap 2015 : Human_Macrophage_Meth Macrophage Roadmap 2015 : Human_NK_Meth NK Human_BCell_Meth BCell Human_CD133HSC_Meth Human_HSPC_Meth Human_Neut_Meth Neut Н1 Human_H1BMP4_Meth H1BMP4 Human_H1-mesendoderm_Meth H1-mesendoderr Human_H1-NPC_Meth H1-NPC Human_Mesenchymal_Meth Human_IMR90_Meth IMR90 IMR90 Cell Line DNA Methylation by Bisulfite-seq Signal from REMC/UCSD (Library:methylC-seq_imr90_r1a) IMR90 BS 1a Human_BloodALLL2_Meth BloodALLL2 Human_BloodALLL1_Meth BloodALLL1 Human_IMR90_Meth IMR90 MCF7 ColonCancer ColonCancer HCC1954 HepG2 an_HepG2_N Ш Human_PancreaticCancer1_Meth PancreaticCancer1 Human_PancreaticCancer2_Meth Human_PancreaticCand PancreaticCancer3 PancreaticCancer4 Human_PancreaticCancer5_Meth PancreaticCancer5 Human_PancreaticCancer6_Meth PancreaticCancer6 Human_PancreaticCancer7_Meth PancreaticCancer7 Human_PancreaticCancer8_Meth PancreaticCancer8 Human_PancreaticCancer9_Meth PancreaticCancer9 Human_PancreaticCancer10_Meth Human_PancreaticCancer11_Meth PancreaticCancer11 H3K27Ac Mark (Often Found Near Active Regulatory Elements) on 7 cell lines from ENCODE Layered H3K27Ac H3K4Me1 Mark (Often Found Near Regulatory Elements) on 7 cell lines from ENCODE Layered H3K4Me1 H3K4Me3 Mark (Often Found Near Promoters) on 7 cell lines from ENCODE Layered H3K4Me3 DNasel Hypersensitivity Clusters in 125 cell types from ENCODE (V3) DNase Clusters Transcription Factor ChIP-seq Clusters (161 factors) from ENCODE with Factorbook Motifs Txn Factor ChIP chromHMM tracks from Roadmap LNG.IMR90 LNG.IMR90 Restriction Enzymes from REBASE Restr Enzymes Non-Human RefSeq Genes
UCSC annotations of RefSeq RNAs (NM_* and NR_*) CpG Islands (Islands < 300 Bases are Light Green) CpG: 42 Placental Mammal Basewise Conservation by PhyloF Mammal Cons Dog Elephant Opossum Chicken X tropicalis Zebrafish Repeating Elements by RepeatMasker RepeatMasker