

Animals

bovine 37
 Didelphidae (marsupial) 263
 dog 75
 horse 110, 112
Macaca mulatta (rhesus monkey) 71
 mouse 30, 46, 67, 95, 153, 180, 222
Oryzias latipes (medaka) 257
Pan troglodytes (chimpanzee) 71
Papio hamadryas (baboon) 80, 83
Papio papio (baboon) 71
 pig 182, 202
 river buffalo 210

Banded chromosome analysis

baboon(DAPI) 71, 83
 baboon(GTG) 80, 83
 chimpanzee(DAPI) 71
 horse(R) 110, 112
 human(DAPI) 32, 34, 41, 58, 95, 145
 human(G) 99, 215, 224, 225, 269
 human(Q) 88, 105, 123
 human(R) 91, 105, 120, 147, 226, 228, 269
 marsupial(G) 263
 monkey(DAPI) 71
 mouse(DAPI) 30, 95, 153, 222
 river buffalo(R) 210

Cell cycle

chromosome position 230
 gene expression 147
 replication timing 247

Chromosome aberration

breakpoint 278
 centric fusion 75, 182
 deletions 49, 75, 238, 284
 duplication/deletion 284
 isochromosome 75, 80, 284
 pericentric inversion 71, 192, 263
 rearrangements 58, 160, 189, 204
 translocations 58, 204, 278

Chromosome mapping workshops

chromosome 21 1

Chromosome structure

chromatin organization 195
 chromosome stretching 37
 interphase nuclei 230

Comparative gene mapping

baboon 71, 80, 83
 bovine 210
 horse 110, 112
 mouse 46, 67, 88, 95, 147, 153, 180, 224, 225, 238
 primates 71, 80, 83
 river buffalo 210

ESTs

electron transport complex I genes 115
 FAD region 14q24.3 107

Evolution

ancestral gene 105, 257, 273
 chromosome 1 71
 Robertsonian fusions 263

Fluorescent in situ hybridization (FISH)

chromosome painting 75, 83, 160, 182, 192, 204, 210, 230
 comparative genomic hybridization 172, 284
 D/C R-banding 172
 direct R banding 147
 DNA breakage detection (DBD) 251
 Fiber-FISH 37
 interphase FISH 215, 230, 247
 multicolor FISH 37, 52, 58, 71, 121, 160, 172, 199, 284
 Multiplex (M)-FISH 160
 quantitative image analysis 195
 replication timing 247
 spectral karyotyping 83, 160
 ZOO-FISH 210

Framework map

14q24.3 107
 chromosome 1p36 199
 chromosome 17 189
 pig chromosome 182

Gene mapping

baboon
 FCGR1 71
 chimpanzee
 FCGR1 71
 horse
 ESR1, PGR 110
 GOT2, KIT 112
 human
 ADPRT, FRA1H, 5S rRNA 121
 BCYRN1 271
 CASP8 95
 COPB2, RBP1 226
 DNCH2 123
 DNFA8 126
 DNMT2 120
 DUSP6 156
 E4F1 99
 ELANH2, PI6, PI9 273
 FTF 269
 GALGT, KIF5A 267
 GLCLR 91
 IKBKB 32
 IMPDH2 145
 MAFG, MAFK 88
 MC4R 97
 NDUFA2, A6, A7, B8, S8 114
 NDUFA5, A8, AB1, B1, B2, B6, B7, B9, B10, C1, S3, S4, S5, S6,
 V2 115
 NFKBIB 105
 OLR1 34
 PLD1 224
 PLD2 225
 SHOX2 228
 STK12 147
 TCFL5 41
 TP73 199
 WBSCR9 238
 XYLB 101
 medaka
 SL2 257

- monkey
 - FCGR1 71
- mouse
 - Casp8* 95
 - Cenpe, Incenp* 67
 - Cenpf* 180
 - Lims1l* 46
 - Pkch* 30
 - Ptprn2* 153
 - Sptlc2* 222
- pig
 - GGT 202
- Genetic damage
 - breakage detection 251
 - canine mammary carcinoma 75
 - diagnosis accuracy 215
- Gene organization
 - CYP19 37
 - DUSP6 156
 - EWSR1-ETV4 breakpoint region 278
 - GLCLR 91
 - MAFG, MAFK 88
 - serpin gene cluster 273
 - WBSCR9 238
 - XYLB 101
- Human disorders
 - Alzheimer's disease 107, 271
 - atherosclerosis 34
 - attention deficit hyperactivity disorder (ADHD) 49
 - B-cell chronic lymphocytic leukemia 215
 - blepharophimosis syndrome 226, 228
 - breast cancer 189
 - Cornelia de Lange syndrome 228
 - deafness 123, 126
 - diabetes mellitus 153
 - Ewings sarcoma 278
 - gliomas 267
 - glutathionuria 202
 - gonadal dysgenesis 52
 - gonadoblastoma 52
 - male fertility 123, 204
 - malignant mesothelioma 91
 - mental retardation with good memory 49
 - mesenchymal tumors 13
 - myotonic dystrophy 247
 - nephroblastoma 284
 - neuroblastoma 199
 - pancreatic cancer 156
 - peripheral neuroectodermal tumors 278
 - retinal degeneration 115
 - Turners syndrome 80
 - Williams syndrome 49
 - Williams-Beuren syndrome 238
 - Wilm's tumor 284
- Hybrids
 - pig-hamster 182
 - radiation hybrid panel 34, 97, 99, 107, 114, 115, 147, 182, 271
 - somatic cell hybrid panel 123
 - sperm-hamster oocyte 204
- Immunohistochemical staining
 - B- and T-cell lineage differentiation 215
 - gene activation 58
 - primary spermatocytes 41
- Karyotype
 - automated analysis 160, 172
 - consistent changes in soft tissue tumors 13
 - marsupial evolution 263
 - XY mosaicism 52
- Linkage
 - hearing loss on chr 11 126
 - interspecific backcross analysis 46, 67, 180
 - Old Order Amish and BCYRN1 271
 - sex and body color 257
- Meiosis
 - segregation of CCRs 204
- Minireview
 - cytogenetic characterization of soft tissue tumors 13
- Physical mapping
 - 1p22.1 91
 - 1q42.1 121
 - 3p21.3 101
 - 14q24.3 107
 - 16p13.3 99
 - 18q22 97
 - 9p and 9q homology 192
 - bovine CYP19 locus 37
 - chromosome 17 189
 - DMPK region 247
 - pig radiation hybrid panel 182
 - serpin genes on 6p25 273
 - WBS deletion region 238
- Repeats
 - (CA)_n polymorphisms 34, 271
 - Alu repeat in breakpoint region 278
 - LOH detected by STRP markers 91
 - repeat expansion 247
 - telomere 195
- Sequence
 - BCYRN1 271
 - EWSR1-ETV4 fusion gene 278
 - FTF 269
 - GLCLR 91
 - MAFG, MAFK 88
 - SL2* 257
 - STK12 147
 - TCFL5 41
 - WBSCR9 238
 - XYLB 101
- Sex chromosomes
 - abnormal baboon X 80
 - Barr body location 230
 - freshwater fish (medaka) 257
 - X inactivation 58
 - X rearrangements 58
 - XY mosaicism in gonads 52
 - Y role in gonad development 52
- Spermatogenesis
 - pachytene stage 41
- Techniques
 - D/C R-banding 172
 - DNA damage analysis at specific regions 251
 - mitogen optimization 215
 - Multiplex-FISH 160
 - RH mapping on non-exon sequences 115