Hongbo Chi

List of Publications by Year in Descending Order

144 papers	11,634 citations	53 h-index	107 g-index
158 ext. papers	14,530 ext. citations	16.6 avg, IF	6.77 L-index

#	Paper	IF	Citations
144	Metabolic adaptation of lymphocytes in immunity and disease.. *Immunity*, **2022**, 55, 14-30	32.3	8
143	Tregs tango with killer cells in acute infection.. *Proceedings of the National Academy of Sciences of the United States of America*, **2022**, 119, e2202400119	11.5	
142	Lipid metabolism in T cell signaling and function.. *Nature Chemical Biology*, **2022**, 18, 470-481	11.7	1
141	CRISPR screens unveil signal hubs for nutrient licensing of T cell immunity. *Nature*, **2021**, 600, 308-313	50.4	3
140	The Impact of T Cell Immunity on Chemotherapy Response in Childhood Acute Lymphoblastic Leukemia. *Blood*, **2021**, 138, 703-703	2.2	
139	In vivo CRISPR screening reveals nutrient signaling processes underpinning CD8 T cell fate decisions. *Cell*, **2021**, 184, 1245-1261.e21	56.2	20
138	Regnase-1 suppresses TCF-1+ precursor exhausted T-cell formation to limit CAR-T-cell responses against ALL. *Blood*, **2021**, 138, 122-135	2.2	11
137	Metabolic Control of Memory T-Cell Generation and Stemness. *Cold Spring Harbor Perspectives in Biology*, **2021**, 13,	10.2	1
136	T cell metabolism in homeostasis and cancer immunity. *Current Opinion in Biotechnology*, **2021**, 68, 240-250	8.4	3
135	Metabolic control of T cells and humoral immunity by phosphatidylethanolamine. *Nature*, **2021**, 595, 724-729	50.4	12
134	Diet-induced dyslipidemia induces metabolic and migratory adaptations in regulatory T cells. *Cardiovascular Research*, **2021**, 117, 1309-1324	9.9	6
133	Network-based systems pharmacology reveals heterogeneity in LCK and BCL2 signaling and therapeutic sensitivity of T-cell acute lymphoblastic leukemia. *Nature Cancer*, **2021**, 2, 284-299	15.4	19
132	Quantifying Proteome and Protein Modifications in Activated T Cells by Multiplexed Isobaric Labeling Mass Spectrometry. *Methods in Molecular Biology*, **2021**, 2285, 297-317	1.4	1
131	Lipid signalling enforces functional specialization of T cells in tumours. *Nature*, **2021**, 591, 306-311	50.4	45
130	Polyamine: A metabolic compass for T helper cell fate direction. *Cell*, **2021**, 184, 4109-4112	56.2	2
129	Investigating the Dynamic Changes in iNKT Cell Metabolic Profiles During Development. *Methods in Molecular Biology*, **2021**, 2388, 181-192	1.4	
128	LCK senses asparagine for T cell activation. *Nature Cell Biology*, **2021**, 23, 7-8	23.4	1

127	Toward a better understanding of T cells in cancer.. *Cancer Cell*, **2021**, 39, 1549-1552	24.3	3
126	Signaling networks in immunometabolism. *Cell Research*, **2020**, 30, 328-342	24.7	49
125	mTOR signaling at the crossroads of environmental signals and T-cell fate decisions. *Immunological Reviews*, **2020**, 295, 15-38	11.3	36
124	Autophagy modulates CD4 T-cell lineage recommitment upon pathogen infection. *Cellular and Molecular Immunology*, **2020**, 17, 682-683	15.4	
123	Reinvigorating NIH Grant Peer Review. *Immunity*, **2020**, 52, 1-3	32.3	13
122	Novel specialized cell state and spatial compartments within the germinal center. *Nature Immunology*, **2020**, 21, 660-670	19.1	26
121	Mevalonate metabolism-dependent protein geranylgeranylation regulates thymocyte egress. *Journal of Experimental Medicine*, **2020**, 217,	16.6	6
120	Deep Multilayer Brain Proteomics Identifies Molecular Networks in Alzheimer's Disease Progression. *Neuron*, **2020**, 105, 975-991.e7	13.9	111
119	Homeostasis and transitional activation of regulatory T cells require c-Myc. *Science Advances*, **2020**, 6, eaaw6443	14.3	26
118	Protein Prenylation Drives Discrete Signaling Programs for the Differentiation and Maintenance of Effector T Cells. *Cell Metabolism*, **2020**, 32, 996-1011.e7	24.6	12
117	Network Approaches for Dissecting the Immune System. *IScience*, **2020**, 23, 101354	6.1	11
116	Hippo/Mst signaling coordinates cellular quiescence with terminal maturation in iNKT cell development and fate decisions. *Journal of Experimental Medicine*, **2020**, 217,	16.6	6
115	Preventing Ubiquitination Improves CAR T Cell Therapy via 'CAR Merry-Go-Around' *Immunity*, **2020**, 53, 243-245	32.3	2
114	Metabolic coordination of T cell quiescence and activation. *Nature Reviews Immunology*, **2020**, 20, 55-70	36.5	161
113	Metabolic sleuthing solves a rare immunodeficiency disease. *Nature Immunology*, **2019**, 20, 1264-1266	19.1	1
112	LKB1 orchestrates dendritic cell metabolic quiescence and anti-tumor immunity. *Cell Research*, **2019**, 29, 391-405	24.7	24
111	Systems immunology: Integrating multi-omics data to infer regulatory networks and hidden drivers of immunity. *Current Opinion in Systems Biology*, **2019**, 15, 19-29	3.2	18
110	Helper T cell differentiation. *Cellular and Molecular Immunology*, **2019**, 16, 634-643	15.4	93

109	Upregulation of PD-L1 via HMGB1-Activated IRF3 and NF-B Contributes to UV Radiation-Induced Immune Suppression. *Cancer Research*, **2019**, 79, 2909-2922	10.1	50
108	AGK Unleashes CD8 T Cell Glycolysis to Combat Tumor Growth. *Cell Metabolism*, **2019**, 30, 233-234	24.6	2
107	Amino Acids License Kinase mTORC1 Activity and Treg Cell Function via Small G Proteins Rag and Rheb. *Immunity*, **2019**, 51, 1012-1027.e7	32.3	39
106	Heme Interaction with the Pyruvate Dehydrogenase Complex: A Novel Strategy to Promote Hypoxic Survival. *FASEB Journal*, **2019**, 33, 652.12	0.9	2
105	Metabolic Control of Treg Cell Stability, Plasticity, and Tissue-Specific Heterogeneity. *Frontiers in Immunology*, **2019**, 10, 2716	8.4	51
104	Targeting REGNASE-1 programs long-lived effector T cells for cancer therapy. *Nature*, **2019**, 576, 471-476	50.4	127
103	Universal Principled Review: A Community-Driven Method to Improve Peer Review. *Cell*, **2019**, 179, 1441-1445	36.2	4
102	Metabolic heterogeneity underlies reciprocal fates of T17 cell stemness and plasticity. *Nature*, **2019**, 565, 101-105	50.4	87
101	Sin1-mTORC2 signaling drives glycolysis of developing thymocytes. *Journal of Molecular Cell Biology*, **2019**, 11, 91-92	6.3	1
100	TAK1 restricts spontaneous NLRP3 activation and cell death to control myeloid proliferation. *Journal of Experimental Medicine*, **2018**, 215, 1023-1034	16.6	107
99	Discrete roles and bifurcation of PTEN signaling and mTORC1-mediated anabolic metabolism underlie IL-7-driven B lymphopoiesis. *Science Advances*, **2018**, 4, eaar5701	14.3	20
98	Hallmarks of T-cell Exit from Quiescence. *Cancer Immunology Research*, **2018**, 6, 502-508	12.5	29
97	Investigating Cellular Quiescence of T Lymphocytes and Antigen-Induced Exit from Quiescence. *Methods in Molecular Biology*, **2018**, 1686, 161-172	1.4	3
96	Metabolic signaling directs the reciprocal lineage decisions of and T cells. *Science Immunology*, **2018**, 3,	28	33
95	Maintenance of CD4 T cell fitness through regulation of Foxo1. *Nature Immunology*, **2018**, 19, 838-848	19.1	31
94	B7-H4 Modulates Regulatory CD4 T Cell Induction and Function via Ligation of a Semaphorin 3a/Plexin A4/Neuropilin-1 Complex. *Journal of Immunology*, **2018**, 201, 897-907	5.3	22
93	The vimentin intermediate filament network restrains regulatory T cell suppression of graft-versus-host disease. *Journal of Clinical Investigation*, **2018**, 128, 4604-4621	15.9	18
92	Hippo Kinases Mst1 and Mst2 Sense and Amplify IL-2R-STAT5 Signaling in Regulatory T Cells to Establish Stable Regulatory Activity. *Immunity*, **2018**, 49, 899-914.e6	32.3	54

91	Emerging Roles of Cellular Metabolism in Regulating Dendritic Cell Subsets and Function. *Frontiers in Cell and Developmental Biology*, **2018**, 6, 152	5.7	20
90	Sprouty branches out to control T cell memory. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 9339-9341	11.5	1
89	GSDMD is critical for autoinflammatory pathology in a mouse model of Familial Mediterranean Fever. *Journal of Experimental Medicine*, **2018**, 215, 1519-1529	16.6	91
88	Hippo/Mst signalling couples metabolic state and immune function of CD8 dendritic cells. *Nature*, **2018**, 558, 141-145	50.4	89
87	mTOR coordinates transcriptional programs and mitochondrial metabolism of activated T subsets to protect tissue homeostasis. *Nature Communications*, **2018**, 9, 2095	17.4	83
86	Dietary Fat Inflames CD4 T Cell Memory in Obesity. *Cell Metabolism*, **2017**, 25, 490-492	24.6	8
85	Integrative Proteomics and Phosphoproteomics Profiling Reveals Dynamic Signaling Networks and Bioenergetics Pathways Underlying T Cell Activation. *Immunity*, **2017**, 46, 488-503	32.3	166
84	mTOR signaling in the differentiation and function of regulatory and effector T cells. *Current Opinion in Immunology*, **2017**, 46, 103-111	7.8	91
83	Gfi1-Foxo1 axis controls the fidelity of effector gene expression and developmental maturation of thymocytes. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, E67-E74	11.5	7
82	Homeostatic control of metabolic and functional fitness of T cells by LKB1 signalling. *Nature*, **2017**, 548, 602-606	50.4	106
81	Metabolism in Immune Cell Differentiation and Function. *Advances in Experimental Medicine and Biology*, **2017**, 1011, 1-85	3.6	10
80	Critical roles of mTORC1 signaling and metabolic reprogramming for M-CSF-mediated myelopoiesis. *Journal of Experimental Medicine*, **2017**, 214, 2629-2647	16.6	29
79	PLC dependent mTOR signalling controls IL-7-mediated early B cell development. *Nature Communications*, **2017**, 8, 1457	17.4	16
78	Nutrient and Metabolic Sensing in T Cell Responses. *Frontiers in Immunology*, **2017**, 8, 247	8.4	51
77	mTORC1 and mTORC2 Kinase Signaling and Glucose Metabolism Drive Follicular Helper T Cell Differentiation. *Immunity*, **2016**, 45, 540-554	32.3	203
76	mTOR inhibition potentiates cytotoxicity of V4 T cells via up-regulating NKG2D and TNF- *Journal of Leukocyte Biology*, **2016**, 100, 1181-1189	6.5	20
75	Autophagy enforces functional integrity of regulatory T cells by coupling environmental cues and metabolic homeostasis. *Nature Immunology*, **2016**, 17, 277-85	19.1	254
74	Metabolic reprogramming of alloantigen-activated T cells after hematopoietic cell transplantation. *Journal of Clinical Investigation*, **2016**, 126, 1337-52	15.9	80

73	AMPK helps T cells survive nutrient starvation. *Immunity*, **2015**, 42, 4-6	32.3	18
72	Treg cells require the phosphatase PTEN to restrain TH1 and TFH cell responses. *Nature Immunology*, **2015**, 16, 178-87	19.1	251
71	Tristetraprolin Limits Inflammatory Cytokine Production in Tumor-Associated Macrophages in an mRNA Decay-Independent Manner. *Cancer Research*, **2015**, 75, 3054-64	10.1	29
70	The NLRP12 Sensor Negatively Regulates Autoinflammatory Disease by Modulating Interleukin-4 Production in T Cells. *Immunity*, **2015**, 42, 654-64	32.3	68
69	mTOR and metabolic regulation of conventional and regulatory T cells. *Journal of Leukocyte Biology* , **2015**, 97, 837-847	6.5	34
68	Metabolic control of regulatory T cell development and function. *Trends in Immunology*, **2015**, 36, 3-12	14.4	175
67	Control of IL-17 receptor signaling and tissue inflammation by the p38MKP-1 signaling axis in a mouse model of multiple sclerosis. *Science Signaling*, **2015**, 8, ra24	8.8	18
66	Mammalian Sterile 20-like Kinase 1 (Mst1) Enhances the Stability of Forkhead Box P3 (Foxp3) and the Function of Regulatory T Cells by Modulating Foxp3 Acetylation. *Journal of Biological Chemistry*, **2015**, 290, 30762-70	5.4	38
65	mTOR Links Environmental Signals to T Cell Fate Decisions. *Frontiers in Immunology*, **2014**, 5, 686	8.4	47
64	Costimulation via the tumor-necrosis factor receptor superfamily couples TCR signal strength to the thymic differentiation of regulatory T cells. *Nature Immunology*, **2014**, 15, 473-81	19.1	178
63	Cutting edge: Discrete functions of mTOR signaling in invariant NKT cell development and NKT17 fate decision. *Journal of Immunology*, **2014**, 193, 4297-4301	5.3	47
62	Tsc1 promotes the differentiation of memory CD8+ T cells via orchestrating the transcriptional and metabolic programs. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 14858-63	11.5	55
61	Genetic dissection of dendritic cell homeostasis and function: lessons from cell type-specific gene ablation. *Cellular and Molecular Life Sciences*, **2014**, 71, 1893-906	10.3	7
60	mTOR signaling, Tregs and immune modulation. *Immunotherapy*, **2014**, 6, 1295-311	3.8	72
59	c-Myc and AP4: a relay team for metabolic reprogramming of CD8+ T cells. *Nature Immunology*, **2014**, 15, 828-9	19.1	5
58	mTOR signaling and transcriptional regulation in T lymphocytes. *Transcription*, **2014**, 5, e28263	4.8	28
57	Metabolic Control of Th17 Cell Generation and CNS Inflammation. *Journal of Neurology & Neurophysiology*, **2014**, Suppl 12,	0.5	5
56	iNKT cells require TSC1 for terminal maturation and effector lineage fate decisions. *Journal of Clinical Investigation*, **2014**, 124, 1685-98	15.9	50

55	Allogeneic T Cells Utilize Glycolysis As the Predominant Metabolic Pathway to Induce Acute Graft-Versus-Host Disease. *Blood*, **2014**, 124, 2419-2419	2.2	1
54	The kinase mTOR modulates the antibody response to provide cross-protective immunity to lethal infection with influenza virus. *Nature Immunology*, **2013**, 14, 1266-76	19.1	137
53	T cell exit from quiescence and differentiation into Th2 cells depend on Raptor-mTORC1-mediated metabolic reprogramming. *Immunity*, **2013**, 39, 1043-56	32.3	231
52	Receptor interacting protein kinase 2-mediated mitophagy regulates inflammasome activation during virus infection. *Nature Immunology*, **2013**, 14, 480-8	19.1	254
51	mTOR and lymphocyte metabolism. *Current Opinion in Immunology*, **2013**, 25, 347-55	7.8	67
50	mTORC1 couples immune signals and metabolic programming to establish T(reg)-cell function. *Nature*, **2013**, 499, 485-90	50.4	518
49	I kappa B kinase alpha (IKK)-activity is required for functional maturation of dendritic cells and acquired immunity to infection. *EMBO Journal*, **2013**, 32, 816-28	13	16
48	Tuberous sclerosis 1 (Tsc1)-dependent metabolic checkpoint controls development of dendritic cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, E4894-903	11.5	65
47	Beneficial innate signaling interference for antibacterial responses by a Toll-like receptor-mediated enhancement of the MKP-IRF3 axis. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 19884-9	11.5	14
46	Inhibitory role of the transcription repressor Gfi1 in the generation of thymus-derived regulatory T cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, E3198-205	11.5	8
45	The interplay between regulatory T cells and metabolism in immune regulation. *OncoImmunology*, **2013**, 2, e26586	7.2	29
44	Control of T cell fates and immune tolerance by p38-signaling in mucosal CD103+ dendritic cells. *Journal of Immunology*, **2013**, 191, 650-9	5.3	30
43	Tuning mTOR activity for immune balance. *Journal of Clinical Investigation*, **2013**, 123, 5001-4	15.9	8
42	Induced senescence: a cunning Foxs new trick. *Blood*, **2012**, 120, 1965-6	2.2	1
41	The DNA damage- and transcription-associated protein paxip1 controls thymocyte development and emigration. *Immunity*, **2012**, 37, 971-85	32.3	23
40	Signaling via the kinase p38-programs dendritic cells to drive TH17 differentiation and autoimmune inflammation. *Nature Immunology*, **2012**, 13, 152-61	19.1	81
39	mTOR and metabolic pathways in T cell quiescence and functional activation. *Seminars in Immunology*, **2012**, 24, 421-8	10.7	70
38	Regulation and function of mTOR signalling in T cell fate decisions. *Nature Reviews Immunology*, **2012**, 12, 325-38	36.5	574

37	Regulation of TH17 cell differentiation by innate immune signals. *Cellular and Molecular Immunology*, **2012**, 9, 287-95	15.4	68
36	JNK and PTEN cooperatively control the development of invasive adenocarcinoma of the prostate. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 12046-51	11.5	71
35	Transforming growth factor beta-activated kinase 1 (TAK1)-dependent checkpoint in the survival of dendritic cells promotes immune homeostasis and function. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, E343-52	11.5	38
34	Inflammasome-derived IL-1 regulates the production of GM-CSF by CD4(+) T cells and T cells. *Journal of Immunology*, **2012**, 188, 3107-15	5.3	84
33	The transcription factor Myc controls metabolic reprogramming upon T lymphocyte activation. *Immunity*, **2011**, 35, 871-82	32.3	1238
32	Deprivation of MKK7 in cardiomyocytes provokes heart failure in mice when exposed to pressure overload. *Journal of Molecular and Cellular Cardiology*, **2011**, 50, 702-11	5.8	24
31	Sphingosine-1-phosphate and immune regulation: trafficking and beyond. *Trends in Pharmacological Sciences*, **2011**, 32, 16-24	13.2	139
30	Signaling via the RIP2 adaptor protein in central nervous system-infiltrating dendritic cells promotes inflammation and autoimmunity. *Immunity*, **2011**, 34, 75-84	32.3	87
29	Signaling by the phosphatase MKP-1 in dendritic cells imprints distinct effector and regulatory T cell fates. *Immunity*, **2011**, 35, 45-58	32.3	43
28	HIF1alpha-dependent glycolytic pathway orchestrates a metabolic checkpoint for the differentiation of TH17 and Treg cells. *Journal of Experimental Medicine*, **2011**, 208, 1367-76	16.6	1127
27	The tumor suppressor Tsc1 enforces quiescence of naive T cells to promote immune homeostasis and function. *Nature Immunology*, **2011**, 12, 888-97	19.1	209
26	HIF1adependent glycolytic pathway orchestrates a metabolic checkpoint for the differentiation of TH17 and Tregcells. *Journal of Cell Biology*, **2011**, 194, i1-i1	7.3	1
25	The S1P(1)-mTOR axis directs the reciprocal differentiation of T(H)1 and T(reg) cells. *Nature Immunology*, **2010**, 11, 1047-56	19.1	236
24	Naturally activated V gamma 4 gamma delta T cells play a protective role in tumor immunity through expression of eomesodermin. *Journal of Immunology*, **2010**, 185, 126-33	5.3	66
23	Cutting edge: critical role for PYCARD/ASC in the development of experimental autoimmune encephalomyelitis. *Journal of Immunology*, **2010**, 184, 4610-4	5.3	112
22	Studies on MAP Kinase signaling in the immune system. *Methods in Molecular Biology*, **2010**, 661, 471-80	1.4	3
21	Loss of mitogen-activated protein kinase kinase kinase 4 (MAP3K4) reveals a requirement for MAPK signalling in mouse sex determination. *PLoS Biology*, **2009**, 7, e1000196	9.7	112
20	The receptor S1P1 overrides regulatory T cell-mediated immune suppression through Akt-mTOR. *Nature Immunology*, **2009**, 10, 769-77	19.1	257

19	Regulation of JNK and p38 MAPK in the immune system: signal integration, propagation and termination. *Cytokine*, **2009**, 48, 161-9	4	193
18	Innate recognition of non-self nucleic acids. *Genome Biology*, **2008**, 9, 211	18.3	25
17	Acetylation of MKP-1 and the control of inflammation. *Science Signaling*, **2008**, 1, pe44	8.8	65
16	COP9 signalosome subunit 8 is essential for peripheral T cell homeostasis and antigen receptor-induced entry into the cell cycle from quiescence. *Nature Immunology*, **2007**, 8, 1236-45	19.1	88
15	Epigenetic and transcriptional programs lead to default IFN-gamma production by gammadelta T cells. *Journal of Immunology*, **2007**, 178, 2730-6	5.3	50
14	Mitogen-activated protein kinase phosphatase-1 (MKP-1): a critical regulator of innate immune responses. *Journal of Organ Dysfunction*, **2007**, 3, 72-81		3
13	Dynamic regulation of pro- and anti-inflammatory cytokines by MAPK phosphatase 1 (MKP-1) in innate immune responses. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 2274-9	11.5	476
12	MEKK4 signaling regulates filamin expression and neuronal migration. *Neuron*, **2006**, 52, 789-801	13.9	101
11	The kinase TAK1 integrates antigen and cytokine receptor signaling for T cell development, survival and function. *Nature Immunology*, **2006**, 7, 851-8	19.1	216
10	Critical function of Bmx/Etk in ischemia-mediated arteriogenesis and angiogenesis. *Journal of Clinical Investigation*, **2006**, 116, 2344-55	15.9	64
9	Loss of mitogen-activated protein kinase kinase kinase 4 (MEKK4) results in enhanced apoptosis and defective neural tube development. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 3846-51	11.5	86
8	JNK1 is essential for CD8+ T cell-mediated tumor immune surveillance. *Journal of Immunology*, **2005**, 175, 5783-9	5.3	32
7	Cutting edge: regulation of T cell trafficking and primary immune responses by sphingosine 1-phosphate receptor 1. *Journal of Immunology*, **2005**, 174, 2485-8	5.3	52
6	GADD45beta/GADD45gamma and MEKK4 comprise a genetic pathway mediating STAT4-independent IFNgamma production in T cells. *EMBO Journal*, **2004**, 23, 1576-86	13	95
5	Somatic mutation and germline variants of MINPP1, a phosphatase gene located in proximity to PTEN on 10q23.3, in follicular thyroid carcinomas. *Journal of Clinical Endocrinology and Metabolism*, **2001**, 86, 1801-5	5.6	25
4	Somatic Mutation and Germline Variants of MINPP1, a Phosphatase Gene Located in Proximity to PTEN on 10q23.3, in Follicular Thyroid Carcinomas. *Journal of Clinical Endocrinology and Metabolism*, **2001**, 86, 1801-1805	5.6	21
3	Absence of germline mutations in MINPP1, a phosphatase encoding gene centromeric of PTEN, in patients with Cowden and Bannayan-Riley-Ruvalcaba syndrome without germline PTEN mutations. *Journal of Medical Genetics*, **2000**, 37, 715-7	5.8	16
2	Targeted deletion of Minpp1 provides new insight into the activity of multiple inositol polyphosphate phosphatase in vivo. *Molecular and Cellular Biology*, **2000**, 20, 6496-507	4.8	50

1	Multiple inositol polyphosphate phosphatase: evolution as a distinct group within the histidine phosphatase family and chromosomal localization of the human and mouse genes to chromosomes 10q23 and 19. *Genomics*, **1999**, 56, 324-36	4.3	47