

Toru Takumi

List of Publications by Year in descending order

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125
papers

34,987
citations

44042

48
h-index

15716

125
g-index

141
all docs

141
docs citations

141
times ranked

70818
citing authors

#	ARTICLE	IF	CITATIONS
1	Ror2 signaling regulates Golgi structure and transport through IFT20 for tumor invasiveness. <i>Scientific Reports</i> , 2017, 7, 1.	1.6	26,112
2	Mutations of optineurin in amyotrophic lateral sclerosis. <i>Nature</i> , 2010, 465, 223-226.	13.7	1,097
3	Abnormal Behavior in a Chromosome- Engineered Mouse Model for Human 15q11-13 Duplication Seen in Autism. <i>Cell</i> , 2009, 137, 1235-1246.	13.5	432
4	The orphan nuclear receptor ROR α regulates circadian transcription of the mammalian core-clock Bmal1. <i>Nature Structural and Molecular Biology</i> , 2005, 12, 441-448.	3.6	411
5	The RNA Binding Protein TLS Is Translocated to Dendritic Spines by mGluR5 Activation and Regulates Spine Morphology. <i>Current Biology</i> , 2005, 15, 587-593.	1.8	327
6	CHD8 haploinsufficiency results in autistic-like phenotypes in mice. <i>Nature</i> , 2016, 537, 675-679.	13.7	268
7	Structural, super-resolution microscopy analysis of paraspeckle nuclear body organization. <i>Journal of Cell Biology</i> , 2016, 214, 817-830.	2.3	262
8	Transcriptional oscillation of canonical clock genes in mouse peripheral tissues. <i>BMC Molecular Biology</i> , 2004, 5, 18.	3.0	259
9	Acute Physical Stress Elevates Mouse Period1 mRNA Expression in Mouse Peripheral Tissues via a Glucocorticoid-responsive Element. <i>Journal of Biological Chemistry</i> , 2005, 280, 42036-42043.	1.6	251
10	Widespread binding of FUS along nascent RNA regulates alternative splicing in the brain. <i>Scientific Reports</i> , 2012, 2, 603.	1.6	231
11	A Novel ATP-dependent Inward Rectifier Potassium Channel Expressed Predominantly in Glial Cells. <i>Journal of Biological Chemistry</i> , 1995, 270, 16339-16346.	1.6	225
12	A new mammalian period gene predominantly expressed in the suprachiasmatic nucleus. <i>Genes To Cells</i> , 1998, 3, 167-176.	0.5	212
13	TLS facilitates transport of mRNA encoding an actin-stabilizing protein to dendritic spines. <i>Journal of Cell Science</i> , 2005, 118, 5755-5765.	1.2	210
14	Myosin-Va Facilitates the Accumulation of mRNA/Protein Complex in Dendritic Spines. <i>Current Biology</i> , 2006, 16, 2345-2351.	1.8	158
15	Domain Architectures and Characterization of an RNA-binding Protein, TLS. <i>Journal of Biological Chemistry</i> , 2004, 279, 44834-44840.	1.6	146
16	Cerebellar plasticity and motor learning deficits in a copy-number variation mouse model of autism. <i>Nature Communications</i> , 2014, 5, 5586.	5.8	144
17	Enhanced synapse remodelling as a common phenotype in mouse models of autism. <i>Nature Communications</i> , 2014, 5, 4742.	5.8	141
18	Molecular cloning and sequence analysis of human genomic DNA encoding A novel membrane protein which exhibits a slowly activating potassium channel activity. <i>Biochemical and Biophysical Research Communications</i> , 1989, 161, 176-181.	1.0	137

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19	GABA-mediated repulsive coupling between circadian clock neurons in the SCN encodes seasonal time. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, E3920-9.	3.3	137
20	Genome-Wide Profiling of the Core Clock Protein BMAL1 Targets Reveals a Strict Relationship with Metabolism. <i>Molecular and Cellular Biology</i> , 2010, 30, 5636-5648.	1.1	134
21	Identification of novel homologues of mouse importin β , the β subunit of the nuclear pore-targeting complex, and their tissue-specific expression. <i>FEBS Letters</i> , 1997, 416, 30-34.	1.3	122
22	A direct repeat of E-box-like elements is required for cell-autonomous circadian rhythm of clock genes. <i>BMC Molecular Biology</i> , 2008, 9, 1.	3.0	122
23	Cerebellar associative sensory learning defects in five mouse autism models. <i>ELife</i> , 2015, 4, e06085.	2.8	120
24	Distinct roles for GABA across multiple timescales in mammalian circadian timekeeping. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, E3911-9.	3.3	120
25	The choroid plexus is an important circadian clock component. <i>Nature Communications</i> , 2018, 9, 1062.	5.8	118
26	A Novel Protein, CHRONO, Functions as a Core Component of the Mammalian Circadian Clock. <i>PLoS Biology</i> , 2014, 12, e1001839.	2.6	113
27	Novel Nonsense Mutation in the Na ⁺ /HCO ₃ ⁻ Cotransporter Gene (SLC4A4) in a Patient with Permanent Isolated Proximal Renal Tubular Acidosis and Bilateral Glaucoma. <i>Journal of the American Society of Nephrology: JASN</i> , 2001, 12, 713-718.	3.0	110
28	Unusual semi-extractability as a hallmark of nuclear body-associated architectural noncoding <sc>RNA</sc>s. <i>EMBO Journal</i> , 2017, 36, 1447-1462.	3.5	107
29	Cellular localization of rat Isk protein in the stria vascularis by immunohistochemical observation. <i>Hearing Research</i> , 1991, 56, 168-172.	0.9	106
30	Robust Food Anticipatory Activity in BMAL1-Deficient Mice. <i>PLoS ONE</i> , 2009, 4, e4860.	1.1	99
31	Decreased Exploratory Activity in a Mouse Model of 15q Duplication Syndrome; Implications for Disturbance of Serotonin Signaling. <i>PLoS ONE</i> , 2010, 5, e15126.	1.1	98
32	Immunohistochemical study of a rat membrane protein which induces a selective potassium permeation: Its localization in the apical membrane portion of epithelial cells. <i>Journal of Membrane Biology</i> , 1990, 113, 39-47.	1.0	97
33	Postsynaptic density proteins and their involvement in neurodevelopmental disorders. <i>Journal of Biochemistry</i> , 2018, 163, 447-455.	0.9	92
34	CNV biology in neurodevelopmental disorders. <i>Current Opinion in Neurobiology</i> , 2018, 48, 183-192.	2.0	89
35	The Receptor Tyrosine Kinase Ror2 Associates with and Is Activated by Casein Kinase β . <i>Journal of Biological Chemistry</i> , 2004, 279, 50102-50109.	1.6	85
36	Of Mice and Men – Universality and Breakdown of Behavioral Organization. <i>PLoS ONE</i> , 2008, 3, e2050.	1.1	83

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37	FUS/TLS deficiency causes behavioral and pathological abnormalities distinct from amyotrophic lateral sclerosis. <i>Acta Neuropathologica Communications</i> , 2015, 3, 24.	2.4	82
38	Genomic and genetic aspects of autism spectrum disorder. <i>Biochemical and Biophysical Research Communications</i> , 2014, 452, 244-253.	1.0	81
39	Behavioral neuroscience of autism. <i>Neuroscience and Biobehavioral Reviews</i> , 2020, 110, 60-76.	2.9	78
40	Functional significance of rare neuroligin 1 variants found in autism. <i>PLoS Genetics</i> , 2017, 13, e1006940.	1.5	76
41	A mammalian ortholog of <i>Drosophila timeless</i> , highly expressed in SCN and retina, forms a complex with mPER1. <i>Genes To Cells</i> , 1999, 4, 67-75.	0.5	69
42	In Vivo Monitoring of Circadian Timing in Freely Moving Mice. <i>Current Biology</i> , 2008, 18, 381-385.	1.8	69
43	Serotonin rebalances cortical tuning and behavior linked to autism symptoms in 15q11-13 CNV mice. <i>Science Advances</i> , 2017, 3, e1603001.	4.7	64
44	Period Coding of Bmal1 Oscillators in the Suprachiasmatic Nucleus. <i>Journal of Neuroscience</i> , 2012, 32, 8900-8918.	1.7	63
45	Network Dynamics Mediate Circadian Clock Plasticity. <i>Neuron</i> , 2017, 93, 441-450.	3.8	63
46	Awake functional MRI detects neural circuit dysfunction in a mouse model of autism. <i>Science Advances</i> , 2020, 6, eaav4520.	4.7	62
47	Molecular Mechanism of Cell-autonomous Circadian Gene Expression of <i>Period2</i> , a Crucial Regulator of the Mammalian Circadian Clock. <i>Molecular Biology of the Cell</i> , 2006, 17, 555-565.	0.9	61
48	A Novel Ubiquitously Distributed Isoform of GIRK2 (GIRK2B) Enhances GIRK1 Expression of the G-Protein-Gated K ⁺ Current in <i>Xenopus</i> Oocytes. <i>Biochemical and Biophysical Research Communications</i> , 1996, 218, 286-291.	1.0	56
49	GH3 Pituitary Tumor Cells Contain Heteromeric Type I and Type II Receptor Complexes for Transforming Growth Factor β^2 and Activin-A. <i>Journal of Biological Chemistry</i> , 1995, 270, 765-769.	1.6	51
50	Fez1 is layer-specifically expressed in the adult mouse neocortex. <i>European Journal of Neuroscience</i> , 2004, 20, 2909-2916.	1.2	51
51	Dual-Color Luciferase Mouse Directly Demonstrates Coupled Expression of Two Clock Genes. <i>Biochemistry</i> , 2010, 49, 8053-8061.	1.2	46
52	The in vitro real-time oscillation monitoring system identifies potential entrainment factors for circadian clocks. <i>BMC Molecular Biology</i> , 2006, 7, 5.	3.0	44
53	Regulation of Zipcode Binding Protein 1 Transport Dynamics in Axons by Myosin Va. <i>Journal of Neuroscience</i> , 2012, 32, 15133-15141.	1.7	43
54	<i>Fezf1</i> is required for penetration of the basal lamina by olfactory axons to promote olfactory development. <i>Journal of Comparative Neurology</i> , 2009, 515, 565-584.	0.9	39

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55	Altered Serotonin, Dopamine and Norepinephrine Levels in 15q Duplication and Angelman Syndrome Mouse Models. <i>PLoS ONE</i> , 2012, 7, e43030.	1.1	37
56	Importin β Mediates Nuclear Transport of a Mammalian Circadian Clock Component, mCRY2, Together with mPER2, through a Bipartite Nuclear Localization Signal. <i>Journal of Biological Chemistry</i> , 2005, 280, 13272-13278.	1.6	35
57	Neuroanatomical Phenotypes Are Consistent With Autism-Like Behavioral Phenotypes in the 15q11-q13 Duplication Mouse Model. <i>Autism Research</i> , 2015, 8, 545-555.	2.1	34
58	Exome sequencing in the knockin mice generated using the CRISPR/Cas system. <i>Scientific Reports</i> , 2016, 6, 34703.	1.6	34
59	Common Defects of Spine Dynamics and Circuit Function in Neurodevelopmental Disorders: A Systematic Review of Findings From in Vivo Optical Imaging of Mouse Models. <i>Frontiers in Neuroscience</i> , 2018, 12, 412.	1.4	34
60	UBE3A-mediated PTPA ubiquitination and degradation regulate PP2A activity and dendritic spine morphology. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 12500-12505.	3.3	32
61	Synapse-Associated Protein 90/Postsynaptic Density-95-Associated Protein (SAPAP) is Expressed Differentially in Phencyclidine-Treated Rats and is Increased in the Nucleus Accumbens of Patients with Schizophrenia. <i>Neuropsychopharmacology</i> , 2003, 28, 1831-1839.	2.8	31
62	Molecular Basis of I κ K Protein Regulation by Oxidation or Chelation. <i>Journal of Biological Chemistry</i> , 1995, 270, 3638-3641.	1.6	29
63	Molecular Characterization of a Type I Serine-Threonine Kinase Receptor for TGF- β 2 and Activin in the Rat Pituitary Tumor Cell Line GH3. <i>Experimental Cell Research</i> , 1995, 216, 208-214.	1.2	28
64	Distinct localization of two serine-threonine kinase receptors for activin and TGF- β 2 in the rat brain and down-regulation of type I activin receptor during peripheral nerve regeneration. <i>Molecular Brain Research</i> , 1996, 42, 263-271.	2.5	27
65	Animal Models of Psychiatric Disorders That Reflect Human Copy Number Variation. <i>Neural Plasticity</i> , 2012, 2012, 1-9.	1.0	26
66	Distinct Defects in Spine Formation or Pruning in Two Gene Duplication Mouse Models of Autism. <i>Neuroscience Bulletin</i> , 2017, 33, 143-152.	1.5	25
67	The neurobiology of mouse models syntenic to human chromosome 15q. <i>Journal of Neurodevelopmental Disorders</i> , 2011, 3, 270-281.	1.5	24
68	A protein-protein interaction of stress-responsive myosin VI endowed to inhibit neural progenitor self-replication with RNA binding protein, TLS, in murine hippocampus. <i>Journal of Neurochemistry</i> , 2009, 110, 1457-1468.	2.1	21
69	Inhibition of cardiac delayed rectifier K ⁺ currents by an antisense oligodeoxynucleotide against I κ K (minK) and over-expression of I κ K mutant D77N in neonatal mouse hearts. <i>Pflügers Archiv European Journal of Physiology</i> , 2001, 442, 329-335.	1.3	20
70	Restoration of circadian behavioural rhythms in a period null <i>Drosophila</i> mutant (per01) by mammalian period homologues <i>Per1</i> and <i>Per2</i> . <i>Genes To Cells</i> , 2002, 7, 163-171.	0.5	20
71	Encoding of social exploration by neural ensembles in the insular cortex. <i>PLoS Biology</i> , 2020, 18, e3000584.	2.6	20
72	Differential Patterns in the Periodicity and Dynamics of Clock Gene Expression in Mouse Liver and Stomach. <i>Chronobiology International</i> , 2012, 29, 1300-1311.	0.9	19

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73	Critical roles of serotonin-oxytocin interaction during the neonatal period in social behavior in 15q dup mice with autistic traits. <i>Scientific Reports</i> , 2018, 8, 13675.	1.6	19
74	Comprehensive topographical map of the serotonergic fibers in the male mouse brain. <i>Journal of Comparative Neurology</i> , 2021, 529, 1391-1429.	0.9	19
75	Constant light enhances synchrony among circadian clock cells and promotes behavioral rhythms in VPAC2-signaling deficient mice. <i>Scientific Reports</i> , 2015, 5, 14044.	1.6	18
76	Characterization and Modeling of Intermittent Locomotor Dynamics in Clock Gene-Deficient Mice. <i>PLoS ONE</i> , 2013, 8, e58884.	1.1	18
77	FUS/TLS acts as an aggregation-dependent modifier of polyglutamine disease model mice. <i>Scientific Reports</i> , 2016, 6, 35236.	1.6	17
78	Skeletal Site-specific Changes in Bone Mass in a Genetic Mouse Model for Human 15q11-13 Duplication Seen in Autism. <i>Scientific Reports</i> , 2017, 7, 9902.	1.6	17
79	Altered Microglia in the Amygdala Are Involved in Anxiety-related Behaviors of a Copy Number Variation Mouse Model of Autism. <i>Journal of Nippon Medical School</i> , 2015, 82, 92-99.	0.3	14
80	A humanoid mouse model of autism. <i>Brain and Development</i> , 2010, 32, 753-758.	0.6	13
81	Model mice for 15q11-13 duplication syndrome exhibit late-onset obesity and altered lipid metabolism. <i>Human Molecular Genetics</i> , 2015, 24, 4559-4572.	1.4	13
82	UBE3A regulates the transcription of IRF, an antiviral immunity. <i>Human Molecular Genetics</i> , 2019, 28, 1947-1958.	1.4	13
83	Change in serotonergic modulation contributes to the synaptic imbalance of neuronal circuit at the prefrontal cortex in the 15q11-13 duplication mouse model of autism. <i>Neuropharmacology</i> , 2020, 165, 107931.	2.0	13
84	CHRONO integrates behavioral stress and epigenetic control of metabolism. <i>Annals of Medicine</i> , 2017, 49, 352-356.	1.5	11
85	Molecular signatures from multi-omics of autism spectrum disorders and schizophrenia. <i>Journal of Neurochemistry</i> , 2021, 159, 647-659.	2.1	10
86	Regulation by Gonadal Steroids of the mRNA Encoding for a Type I Receptor for TGF- β 2 in the Female Rat Hypothalamus. <i>Neuroendocrinology</i> , 2002, 76, 1-7.	1.2	9
87	TLS interaction with NMDA R1 splice variant in retinal ganglion cell line RGC-5. <i>Neuroscience Letters</i> , 2009, 450, 163-166.	1.0	9
88	TLS-GFP cannot rescue mRNP formation near spines and spine phenotype in TLS-KO. <i>NeuroReport</i> , 2009, 20, 57-61.	0.6	9
89	Identification of genes regulating GABAergic interneuron maturation. <i>Neuroscience Research</i> , 2018, 134, 18-29.	1.0	9
90	Behavioral analysis in mice deficient for GAREM2 (Grb2-associated regulator of Erk/MAPK subtype2) that is a subtype of highly expressing in the brain. <i>Molecular Brain</i> , 2019, 12, 94.	1.3	9

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91	The resetting of the circadian rhythm by Prostaglandin J ₂ is distinctly phase-dependent. <i>FEBS Letters</i> , 2009, 583, 413-418.	1.3	8
92	Autism spectrum disorder model mice: Focus on copy number variation and epigenetics. <i>Science China Life Sciences</i> , 2015, 58, 976-984.	2.3	8
93	Morphological Pattern and Classification of the Superficial Middle Cerebral Vein by Cadaver Dissections: An Embryological Viewpoint. <i>Neurologia Medico-Chirurgica</i> , 2019, 59, 264-270.	1.0	8
94	Altered microbiota composition reflects enhanced communication in 15q11-13 CNV mice. <i>Neuroscience Research</i> , 2020, 161, 59-67.	1.0	8
95	Genetic dissection identifies <i>Necdin</i> as a driver gene in a mouse model of paternal 15q duplications. <i>Nature Communications</i> , 2021, 12, 4056.	5.8	8
96	A Putative Transcription Factor with Seven Zinc-Finger Motifs Identified in the Developing Suprachiasmatic Nucleus by the Differential Display PCR Method. <i>Journal of Neuroscience</i> , 1999, 19, 10176-10183.	1.7	7
97	Nuclear Receptor-mediated Cell-autonomous Oscillatory Expression of the Circadian Transcription Factor, Neuronal PAS Domain Protein 2 (<i>NPAS2</i>). <i>Journal of Biological Chemistry</i> , 2013, 288, 36548-36553.	1.6	7
98	DEC2/E4BP4 Heterodimer Represses the Transcriptional Enhancer Activity of the EE Element in the <i>Per2</i> Promoter. <i>Frontiers in Neurology</i> , 2015, 6, 166.	1.1	7
99	Recent genetic and functional insights in autism spectrum disorder. <i>Current Opinion in Neurology</i> , 2019, 32, 627-634.	1.8	7
100	Behavioral and neuroanatomical analyses in a genetic mouse model of 2q13 duplication. <i>Genes To Cells</i> , 2017, 22, 436-451.	0.5	6
101	Rodent models of genetic and chromosomal variations in psychiatric disorders. <i>Psychiatry and Clinical Neurosciences</i> , 2017, 71, 508-517.	1.0	6
102	CHRONO and DEC1/DEC2 compensate for lack of CRY1/CRY2 in expression of coherent circadian rhythm but not in generation of circadian oscillation in the neonatal mouse SCN. <i>Scientific Reports</i> , 2021, 11, 19240.	1.6	6
103	Assignment of the Murine Inward Rectifier Potassium Channel <i>Irk2</i> (<i>Kir2.2</i>) Gene to the Central Region of Mouse Chromosome 11. <i>Genomics</i> , 1996, 37, 270-272.	1.3	5
104	Transcriptome profiling of white adipose tissue in a mouse model for 15q duplication syndrome. <i>Genomics Data</i> , 2015, 5, 394-396.	1.3	5
105	Upregulated 5-HT1A receptor-mediated currents in the prefrontal cortex layer 5 neurons in the 15q11-13 duplication mouse model of autism. <i>Molecular Brain</i> , 2020, 13, 115.	1.3	5
106	Cranioplastic Surgery and Acclimation Training for Awake Mouse fMRI. <i>Bio-protocol</i> , 2021, 11, e3972.	0.2	5
107	Optogenetic Approaches to Understand the Neural Circuit Mechanism of Social Deficits Seen in Autism Spectrum Disorders. <i>Advances in Experimental Medicine and Biology</i> , 2021, 1293, 523-533.	0.8	4
108	Imaging the Neural Circuit Basis of Social Behavior: Insights from Mouse and Human Studies. <i>Neurologia Medico-Chirurgica</i> , 2020, 60, 429-438.	1.0	4

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109	A common epigenetic mechanism across different cellular origins underlies systemic immune dysregulation in an idiopathic autism mouse model. <i>Molecular Psychiatry</i> , 2022, 27, 3343-3354.	4.1	4
110	Alterations of Gating Parameters by Neutral Substitutions of Transmembrane Leu52 of Slow Potassium Channel. <i>Annals of the New York Academy of Sciences</i> , 1993, 707, 402-406.	1.8	3
111	Development of serotonergic projections to the suprachiasmatic nucleus in the mouse brain. <i>Neuroscience Letters</i> , 2020, 739, 135438.	1.0	3
112	Serotonin Disturbance in Mouse Models of Autism Spectrum Disorders. <i>Neuromethods</i> , 2015, , 239-262.	0.2	3
113	mTOR-AKT Signaling in Cellular Clock Resetting Triggered by Osmotic Stress. <i>Antioxidants and Redox Signaling</i> , 2022, 37, 631-646.	2.5	3
114	A Dye Terminator Method for Automated DNA Sequencing Using Four Fluorescent Dideoxynucleosides and Thermal Cycling. <i>Analytical Sciences</i> , 1997, 13, 735-739.	0.8	2
115	Helix-loop-helix Protein Id2 Stabilizes Mammalian Circadian Oscillation Under Constant Light Conditions. <i>Zoological Science</i> , 2013, 30, 1011-1018.	0.3	2
116	Transcriptome analysis of human neural cells derived from isogenic embryonic stem cells with 16p11.2 deletion. <i>Neuroscience Research</i> , 2021, 171, 114-123.	1.0	2
117	Species-specific formation of paraspeckles in intestinal epithelium revealed by characterization of <i>NEAT1</i> in naked mole-rat. <i>Rna</i> , 2022, 28, 1128-1143.	1.6	2
118	Assignment of the murine inwardly rectifying potassium channel IRK3 gene (<i>Kcnj4</i>) to the mouse Chromosome 15. <i>Mammalian Genome</i> , 1997, 8, 699-700.	1.0	1
119	Translocated in liposarcoma regulates the distribution and function of mammalian enabled, a modulator of actin dynamics. <i>FEBS Journal</i> , 2016, 283, 1475-1487.	2.2	1
120	Quantitative evaluation of incomplete preweaning lethality in mice by using the CRISPR/Cas9 system. <i>Scientific Reports</i> , 2018, 8, 16025.	1.6	1
121	Fetal neural stem cells from a mouse model of 15q11-13 duplication syndrome exhibit altered differentiation into neurons and astrocytes. <i>Journal of Pharmacological Sciences</i> , 2019, 139, 249-253.	1.1	1
122	Morphological Classification of the Medial Frontal Cortex Based on Cadaver Dissections: A Guide for Interhemispheric Approach. <i>Neurologia Medico-Chirurgica</i> , 2021, 61, 302-311.	1.0	1
123	Sensing the Sounds of Silence: A Pilot Study on the Detection of Model Mice of Autism Spectrum Disorder from Ultrasonic Vocalisations. , 2021, 2021, 68-71.		1
124	Familial Insulin-Resistant Diabetes Mellitus without Acanthosis Nigricans or Androgenization. <i>Pediatrics International</i> , 1988, 30, 608-614.	0.2	0
125	Gene expression profile data of the developing small intestine of Id2-deficient mice. <i>Data in Brief</i> , 2019, 24, 103717.	0.5	0