

# Replication confers $\hat{I}^2$ cell immaturity

Nature Communications

9, 485

DOI: [10.1038/s41467-018-02939-0](https://doi.org/10.1038/s41467-018-02939-0)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Adrb2 controls glucose homeostasis by developmental regulation of pancreatic islet vasculature. <i>ELife</i> , 2018, 7, .	2.8	20
2	Single-Cell Transcriptome Profiling of Mouse and hESC-Derived Pancreatic Progenitors. <i>Stem Cell Reports</i> , 2018, 11, 1551-1564.	2.3	94
3	The Impact of Pancreatic Beta Cell Heterogeneity on Type 1 Diabetes Pathogenesis. <i>Current Diabetes Reports</i> , 2018, 18, 112.	1.7	17
4	Recent advances in deriving human endodermal tissues from pluripotent stem cells. <i>Current Opinion in Cell Biology</i> , 2019, 61, 92-100.	2.6	14
5	Myc Is Required for Adaptive $\beta$ -Cell Replication in Young Mice but Is Not Sufficient in One-Year-Old Mice Fed With a High-Fat Diet. <i>Diabetes</i> , 2019, 68, 1934-1949.	0.3	23
6	The Lysine Demethylase KDM5B Regulates Islet Function and Glucose Homeostasis. <i>Journal of Diabetes Research</i> , 2019, 2019, 1-15.	1.0	15
7	$\beta$ -Cell Maturation and Identity in Health and Disease. <i>International Journal of Molecular Sciences</i> , 2019, 20, 5417.	1.8	60
8	Pancreatic $\beta$ -cell-specific deletion of insulin-degrading enzyme leads to dysregulated insulin secretion and $\beta$ -cell functional immaturity. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , 2019, 317, E805-E819.	1.8	23
9	IAPP toxicity activates HIF1 $\alpha$ /PFKFB3 signaling delaying $\beta$ -cell loss at the expense of $\beta$ -cell function. <i>Nature Communications</i> , 2019, 10, 2679.	5.8	55
10	Contribution of Oxidative Stress and Impaired Biogenesis of Pancreatic $\beta$ -Cells to Type 2 Diabetes. <i>Antioxidants and Redox Signaling</i> , 2019, 31, 722-751.	2.5	50
11	Modelling the endocrine pancreas in health and disease. <i>Nature Reviews Endocrinology</i> , 2019, 15, 155-171.	4.3	71
12	Pancreatic $\beta$ cell regeneration: to $\beta$ or not to $\beta$ . <i>Current Opinion in Physiology</i> , 2020, 14, 13-20.	0.9	15
13	Identification of a LIF-Responsive, Replication-Competent Subpopulation of Human $\beta$ Cells. <i>Cell Metabolism</i> , 2020, 31, 327-338.e6.	7.2	17
14	LIN28B Impairs the Transition of hESC-Derived $\beta$ Cells from the Juvenile to Adult State. <i>Stem Cell Reports</i> , 2020, 14, 9-20.	2.3	9
15	Diabetes Mellitus Is a Chronic Disease that Can Benefit from Therapy with Induced Pluripotent Stem Cells. <i>International Journal of Molecular Sciences</i> , 2020, 21, 8685.	1.8	13
16	TBK1 regulates regeneration of pancreatic $\beta$ -cells. <i>Scientific Reports</i> , 2020, 10, 19374.	1.6	3
17	The efficiency of insulin production and its content in insulin-expressing model $\beta$ -cells correlate with their Zn <sup>2+</sup> levels. <i>Open Biology</i> , 2020, 10, 200137.	1.5	5
18	Transcriptomic and Quantitative Proteomic Profiling Reveals Signaling Pathways Critical for Pancreatic Islet Maturation. <i>Endocrinology</i> , 2020, 161, .	1.4	10

#	ARTICLE	IF	CITATIONS
19	Single-Cell Transcriptome Analysis Dissects the Replicating Process of Pancreatic Beta Cells in Partial Pancreatectomy Model. <i>IScience</i> , 2020, 23, 101774.	1.9	15
20	Spontaneous restoration of functional $\beta$ -cell mass in obese SM/J mice. <i>Physiological Reports</i> , 2020, 8, e14573.	0.7	5
21	Maternal hypothyroidism in mice influences glucose metabolism in adult offspring. <i>Diabetologia</i> , 2020, 63, 1822-1835.	2.9	11
22	<i>Costus pictus</i> D. Don leaf extract stimulates GLP-1 secretion from GLUTag L-cells and has cytoprotective effects in BRIN-BD11 $\beta$ -cells. <i>Journal of Ethnopharmacology</i> , 2020, 260, 112970.	2.0	7
23	Identification of a small molecule that stimulates human $\beta$ -cell proliferation and insulin secretion, and protects against cytotoxic stress in rat insulinoma cells. <i>PLoS ONE</i> , 2020, 15, e0224344.	1.1	18
24	Long-Term Liraglutide Administration Induces Pancreas Neogenesis in Adult T2DM Mice. <i>Cell Transplantation</i> , 2020, 29, 096368972092739.	1.2	6
25	The glucose-lowering effects of $\alpha$ -glucosidase inhibitor require a bile acid signal in mice. <i>Diabetologia</i> , 2020, 63, 1002-1016.	2.9	10
26	The RB gene family controls the maturation state of the EndoC- $\beta$ 2 human pancreatic $\beta$ -cells. <i>Differentiation</i> , 2020, 113, 1-9.	1.0	3
27	Two drugs converged in a pancreatic $\beta$ cell. <i>Science Translational Medicine</i> , 2020, 12, .	5.8	7
28	Engineered Biomaterials for Enhanced Function of Insulin-Secreting $\beta$ -Cell Organoids. <i>Advanced Functional Materials</i> , 2020, 30, 2000134.	7.8	16
29	A Stem Cell Approach to Cure Type 1 Diabetes. <i>Cold Spring Harbor Perspectives in Biology</i> , 2021, 13, a035741.	2.3	42
30	Enhanced structure and function of human pluripotent stem cell-derived beta-cells cultured on extracellular matrix. <i>Stem Cells Translational Medicine</i> , 2021, 10, 492-505.	1.6	19
31	The many lives of Myc in the pancreatic $\beta$ -cell. <i>Journal of Biological Chemistry</i> , 2021, 296, 100122.	1.6	16
32	Autosomal dominant diabetes associated with a novel ZYG11A mutation resulting in cell cycle arrest in beta-cells. <i>Molecular and Cellular Endocrinology</i> , 2021, 522, 111126.	1.6	3
33	Translational Factor eIF4G1 Regulates Glucose Homeostasis and Pancreatic $\beta$ -Cell Function. <i>Diabetes</i> , 2021, 70, 155-170.	0.3	10
34	Regulation of ATR-dependent DNA damage response by nitric oxide. <i>Journal of Biological Chemistry</i> , 2021, 296, 100388.	1.6	3
35	SIX2 and SIX3 coordinately regulate functional maturity and fate of human pancreatic $\beta$ cells. <i>Genes and Development</i> , 2021, 35, 234-249.	2.7	26
36	CDK2 limits the highly energetic secretory program of mature $\beta$ cells by restricting PEP cycle-dependent KATP channel closure. <i>Cell Reports</i> , 2021, 34, 108690.	2.9	8

#	ARTICLE	IF	CITATIONS
37	Cell Cycle Regulation of the Pdx1 Transcription Factor in Developing Pancreas and Insulin-Producing $\beta$ -Cells. <i>Diabetes</i> , 2021, 70, 903-916.	0.3	10
38	Human Pluripotent Stem Cells to Model Islet Defects in Diabetes. <i>Frontiers in Endocrinology</i> , 2021, 12, 642152.	1.5	24
40	Reduced replication fork speed promotes pancreatic endocrine differentiation and controls graft size. <i>JCI Insight</i> , 2021, 6, .	2.3	22
41	The hepatokine fetuin-A disrupts functional maturation of pancreatic beta cells. <i>Diabetologia</i> , 2021, 64, 1358-1374.	2.9	14
42	Islet Regeneration: Endogenous and Exogenous Approaches. <i>International Journal of Molecular Sciences</i> , 2021, 22, 3306.	1.8	12
44	Cellulose-based scaffolds enhance pseudoislets formation and functionality. <i>Biofabrication</i> , 2021, 13, 035044.	3.7	13
45	In vivo screen identifies a SIK inhibitor that induces $\beta$ cell proliferation through a transient UPR. <i>Nature Metabolism</i> , 2021, 3, 682-700.	5.1	18
46	DNA Methylation Patterning and the Regulation of Beta Cell Homeostasis. <i>Frontiers in Endocrinology</i> , 2021, 12, 651258.	1.5	27
47	Single-cell transcriptome analysis defines heterogeneity of the murine pancreatic ductal tree. <i>ELife</i> , 2021, 10, .	2.8	23
48	Islet Epigenetic Impacts on $\beta$ -Cell Identity and Function. , 2021, 11, 1961-1978.		0
49	Decreased KATP Channel Activity Contributes to the Low Glucose Threshold for Insulin Secretion of Rat Neonatal Islets. <i>Endocrinology</i> , 2021, 162, .	1.4	14
50	Transcriptional mechanisms of pancreatic $\beta$ -cell maturation and functional adaptation. <i>Trends in Endocrinology and Metabolism</i> , 2021, 32, 474-487.	3.1	23
51	CD47 and thrombospondin-1 regulation of mitochondria, metabolism, and diabetes. <i>American Journal of Physiology - Cell Physiology</i> , 2021, 321, C201-C213.	2.1	13
52	Debates in Pancreatic Beta Cell Biology: Proliferation Versus Progenitor Differentiation and Transdifferentiation in Restoring $\beta$ Cell Mass. <i>Frontiers in Endocrinology</i> , 2021, 12, 722250.	1.5	17
53	DYRK1A Kinase Inhibitors Promote $\beta$ -Cell Survival and Insulin Homeostasis. <i>Cells</i> , 2021, 10, 2263.	1.8	8
54	Endoplasmic Reticulum Stress Induced Proliferation Remains Intact in Aging Mouse $\beta$ -Cells. <i>Frontiers in Endocrinology</i> , 2021, 12, 734079.	1.5	4
55	Cross-talk among MEN1, p53 and Notch regulates the proliferation of pancreatic neuroendocrine tumor cells by modulating INSM1 expression and subcellular localization. <i>Neoplasia</i> , 2021, 23, 979-992.	2.3	13
56	SetD7 (Set7/9) is a novel target of PPAR $\beta$ that promotes the adaptive pancreatic $\beta$ -cell glycemic response. <i>Journal of Biological Chemistry</i> , 2021, 297, 101250.	1.6	4

#	ARTICLE	IF	CITATIONS
57	The Transcriptome and Epigenome Reveal Novel Changes in Transcription Regulation During Pancreatic Rat Islet Maturation. <i>Endocrinology</i> , 2021, 162, .	1.4	4
58	Butyrate Protects Pancreatic Beta Cells from Cytokine-Induced Dysfunction. <i>International Journal of Molecular Sciences</i> , 2021, 22, 10427.	1.8	19
59	Pancreatic $\beta$ -Cell Development and Regeneration. <i>Cold Spring Harbor Perspectives in Biology</i> , 2022, 14, a040741.	2.3	4
60	The miR-200/Zeb1 axis regulates key aspects of $\beta$ -cell function and survival in vivo. <i>Molecular Metabolism</i> , 2021, 53, 101267.	3.0	9
61	Enhancing <i>Acsl4</i> in absence of mTORC2/Rictor drove $\beta$ -cell dedifferentiation via inhibiting FoxO1 and promoting ROS production. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 2021, 1867, 166261.	1.8	4
64	Modulation of Insulin Sensitivity by Insulin-Degrading Enzyme. <i>Biomedicines</i> , 2021, 9, 86.	1.4	35
65	Integration of single-cell datasets reveals novel transcriptomic signatures of $\beta$ -cells in human type 2 diabetes. <i>NAR Genomics and Bioinformatics</i> , 2020, 2, lqaa097.	1.5	15
68	The supply chain of human pancreatic $\beta$ cell lines. <i>Journal of Clinical Investigation</i> , 2019, 129, 3511-3520.	3.9	35
69	Islet-specific Prmt5 excision leads to reduced insulin expression and glucose intolerance in mice. <i>Journal of Endocrinology</i> , 2020, 244, 41-52.	1.2	6
75	Relationships between type 2 diabetes, cell dysfunction, and redox signaling: A meta-analysis of single-cell gene expression of human pancreatic $\alpha$ - and $\beta$ -cells. <i>Journal of Diabetes</i> , 2022, 14, 34-51.	0.8	6
79	Stem Cells: A Renewable Source of Pancreatic $\beta$ -Cells and Future for Diabetes Treatment. , 2021, , 185-202.		5
80	Mitogen Synergy: An Emerging Route to Boosting Human Beta Cell Proliferation. <i>Frontiers in Cell and Developmental Biology</i> , 2021, 9, 734597.	1.8	8
81	MYCL-mediated reprogramming expands pancreatic insulin-producing cells. <i>Nature Metabolism</i> , 2022, 4, 254-268.	5.1	7
82	Mechanisms Underlying the Expansion and Functional Maturation of $\beta$ -Cells in Newborns: Impact of the Nutritional Environment. <i>International Journal of Molecular Sciences</i> , 2022, 23, 2096.	1.8	6
83	Phosphatases are predicted to govern prolactin-mediated JAK-STAT signaling in pancreatic beta cells. <i>Integrative Biology (United Kingdom)</i> , 2022, 14, 37-48.	0.6	1
84	Dysregulation of $\beta$ -Cell Proliferation in Diabetes: Possibilities of Combination Therapy in the Development of a Comprehensive Treatment. <i>Biomedicines</i> , 2022, 10, 472.	1.4	7
85	XBP1 maintains beta cell identity, represses beta-to-alpha cell transdifferentiation and protects against diabetic beta cell failure during metabolic stress in mice. <i>Diabetologia</i> , 2022, 65, 984-996.	2.9	25
86	Functional, metabolic and transcriptional maturation of human pancreatic islets derived from stem cells. <i>Nature Biotechnology</i> , 2022, 40, 1042-1055.	9.4	135

#	ARTICLE	IF	CITATIONS
87	Lessons from neonatal $\beta$ -cell epigenomic for diabetes prevention and treatment. Trends in Endocrinology and Metabolism, 2022, 33, 378-389.	3.1	5
88	Pan-AMPK activator O304 prevents gene expression changes and remobilisation of histone marks in islets of diet-induced obese mice. Scientific Reports, 2021, 11, 24410.	1.6	6
89	Polycomb Repressive Complexes: Shaping Pancreatic Beta-Cell Destiny in Development and Metabolic Disease. Frontiers in Cell and Developmental Biology, 2022, 10, .	1.8	3
90	NR5A2/LRH-1 regulates the PTGS2-PGE2-PTGER1 pathway contributing to pancreatic islet survival and function. IScience, 2022, 25, 104345.	1.9	9
92	Heterogeneous Development of $\beta$ -Cell Populations in Diabetes-Resistant and -Susceptible Mice. Diabetes, 2022, 71, 1962-1978.	0.3	3
93	Evaluation of the Effects of Harmine on $\beta$ -cell Function and Proliferation in Standardized Human Islets Using 3D High-Content Confocal Imaging and Automated Analysis. Frontiers in Endocrinology, 0, 13, .	1.5	10
94	Maladaptive positive feedback production of ChREBP $\beta$ underlies glucotoxic $\beta$ -cell failure. Nature Communications, 2022, 13, .	5.8	9
95	Enhancing $\beta$ -cell function and proliferation in human islets using a novel small molecule activator of the insulin signaling pathway. Diabetes, 2022, 71, 1962-1978.	1.5	10
96	Harnessing conserved signaling and metabolic pathways to enhance the maturation of functional engineered tissues. Npj Regenerative Medicine, 2022, 7, .	2.5	1
97	Milk Exosomal microRNAs: Postnatal Promoters of $\beta$ Cell Proliferation but Potential Inducers of $\beta$ Cell De-Differentiation in Adult Life. International Journal of Molecular Sciences, 2022, 23, 11503.	1.8	8
99	T3 and glucose increase expression of phosphoenolpyruvate carboxykinase (PCK1) leading to increased $\beta$ -cell proliferation. Molecular Metabolism, 2022, 66, 101646.	3.0	3
101	Spontaneously evolved progenitor niches escape Yap oncogene addiction in advanced pancreatic ductal adenocarcinomas. Nature Communications, 2023, 14, .	5.8	1
102	Glucocorticoid-mediated induction of ZBTB16 affects insulin secretion in human islets and EndoC- $\beta$ H1 $\beta$ -cells. IScience, 2023, 26, 106555.	1.9	0
111	Stammzellen: Eine erneuerbare Quelle für $\beta$ -Zellen der Bauchspeicheldrüse und die Zukunft der Diabetesbehandlung. , 2023, , 205-224.		0