

Derivation of Human Trophoblast Stem Cells

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Hemochorial placentation: development, function, and adaptations. <i>Biology of Reproduction</i> , 2018, 99, 196-211.	1.2	128
2	Successful derivation of human trophoblast stem cells. <i>Biology of Reproduction</i> , 2018, 99, 271-272.	1.2	2
3	A niche of trophoblast progenitor cells identified by integrin $\alpha 2$ is present in first trimester human placentas. <i>Development (Cambridge)</i> , 2018, 145, .	1.2	54
4	Specification of trophoblast from embryonic stem cells exposed to BMP4. <i>Biology of Reproduction</i> , 2018, 99, 212-224.	1.2	49
5	The enhancer RNA Inc-SLC4A1-1 epigenetically regulates unexplained recurrent pregnancy loss (URPL) by activating CXCL8 and NF- κ B pathway. <i>EBioMedicine</i> , 2018, 38, 162-170.	2.7	85
6	The role of DNA methylation in human trophoblast differentiation. <i>Epigenetics</i> , 2018, 13, 1154-1173.	1.3	38
7	Regulation of Placental Extravillous Trophoblasts by the Maternal Uterine Environment. <i>Frontiers in Immunology</i> , 2018, 9, 2597.	2.2	265
8	Trophoblast organoids as a model for maternal-fetal interactions during human placentation. <i>Nature</i> , 2018, 564, 263-267.	13.7	436
9	Isolation of villous cytotrophoblasts from second trimester human placentas. <i>Placenta</i> , 2018, 74, 55-58.	0.7	2
10	Reduced Uteroplacental Perfusion Pressure (RUPP) causes altered trophoblast differentiation and pericyte reduction in the mouse placenta labyrinth. <i>Scientific Reports</i> , 2018, 8, 17162.	1.6	30
11	Development of trophoblast cystic structures from human induced pluripotent stem cells in limited-area cell culture. <i>Biochemical and Biophysical Research Communications</i> , 2018, 505, 671-676.	1.0	6
12	Genome amplification and cellular senescence are hallmarks of human placenta development. <i>PLoS Genetics</i> , 2018, 14, e1007698.	1.5	64
13	Genetic Control of Early Cell Lineages in the Mammalian Embryo. <i>Annual Review of Genetics</i> , 2018, 52, 185-201.	3.2	85
14	Self-Renewing Trophoblast Organoids Recapitulate the Developmental Program of the Early Human Placenta. <i>Stem Cell Reports</i> , 2018, 11, 537-551.	2.3	273
15	Human trophoblasts are primarily distinguished from somatic cells by differences in the pattern rather than the degree of global CpG methylation. <i>Biology Open</i> , 2018, 7, .	0.6	6
16	Deconstructing and reconstructing the mouse and human early embryo. <i>Nature Cell Biology</i> , 2018, 20, 878-887.	4.6	161
17	The role of connexins during early embryonic development: pluripotent stem cells, gene editing, and artificial embryonic tissues as tools to close the knowledge gap. <i>Histochemistry and Cell Biology</i> , 2018, 150, 327-339.	0.8	12
18	Functional genetics of early human development. <i>Current Opinion in Genetics and Development</i> , 2018, 52, 1-6.	1.5	17

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19	Exploring early human embryo development. <i>Science</i> , 2018, 360, 1075-1076.	6.0	42
20	Human trophoblast stem cell self-renewal and differentiation: Role of decorin. <i>Scientific Reports</i> , 2018, 8, 8977.	1.6	26
21	Human Pre-gastrulation Development. <i>Current Topics in Developmental Biology</i> , 2018, 128, 295-338.	1.0	59
22	Tumor Microenvironment and Cell Fusion. <i>BioMed Research International</i> , 2019, 2019, 1-12.	0.9	27
23	Establishment of human trophoblast stem cells from human induced pluripotent stem cell-derived cystic cells under micromesh culture. <i>Stem Cell Research and Therapy</i> , 2019, 10, 245.	2.4	41
24	The mammalian embryo's first agenda: making trophectoderm. <i>International Journal of Developmental Biology</i> , 2019, 63, 157-170.	0.3	13
25	Differentiation of derived rabbit trophoblast stem cells under fluid shear stress to mimic the trophoblastic barrier. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2019, 1863, 1608-1618.	1.1	11
26	Pre-eclampsia: pathophysiology and clinical implications. <i>BMJ: British Medical Journal</i> , 2019, 366, l2381.	2.4	613
27	Roles of MicroRNAs in Establishing and Modulating Stem Cell Potential. <i>International Journal of Molecular Sciences</i> , 2019, 20, 3643.	1.8	19
28	Trophoblast type-specific expression of senescence markers in the human placenta. <i>Placenta</i> , 2019, 85, 56-62.	0.7	15
29	Super-enhancer-guided mapping of regulatory networks controlling mouse trophoblast stem cells. <i>Nature Communications</i> , 2019, 10, 4749.	5.8	45
30	Dynamics of trophoblast differentiation in peri-implantation stage human embryos. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 22635-22644.	3.3	68
31	An Improved Two-Step Protocol for Trophoblast Differentiation of Human Pluripotent Stem Cells. <i>Current Protocols in Stem Cell Biology</i> , 2019, 50, e96.	3.0	31
32	Single-cell RNA sequencing reveals regulatory mechanism for trophoblast cell-fate divergence in human peri-implantation conceptuses. <i>PLoS Biology</i> , 2019, 17, e3000187.	2.6	60
33	Modeling the Placenta with Stem Cells. <i>New England Journal of Medicine</i> , 2019, 381, 1681-1683.	13.9	7
34	Interaction of Pregnancy-Specific Glycoprotein 1 With Integrin $\alpha 5 \beta 1$ Is a Modulator of Extravillous Trophoblast Functions. <i>Cells</i> , 2019, 8, 1369.	1.8	30
35	Regulation of human trophoblast syncytialization by histone demethylase LSD1. <i>Journal of Biological Chemistry</i> , 2019, 294, 17301-17313.	1.6	22
36	The underdeveloped innate immunity in embryonic stem cells: The molecular basis and biological perspectives from early embryogenesis. <i>American Journal of Reproductive Immunology</i> , 2019, 81, e13089.	1.2	16

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38	Human <i>in vitro</i> fertilisation and developmental biology: a mutually influential history. <i>Development (Cambridge)</i> , 2019, 146, .	1.2	18
39	Recent insights into the naïve state of human pluripotency and its applications. <i>Experimental Cell Research</i> , 2019, 385, 111645.	1.2	30
40	Imprinted MicroRNA Gene Clusters in the Evolution, Development, and Functions of Mammalian Placenta. <i>Frontiers in Genetics</i> , 2018, 9, 706.	1.1	67
41	Cellular systems biology identifies dynamic trophoblast populations in early human placentas. <i>Placenta</i> , 2019, 76, 10-18.	0.7	13
42	Paracrine action of human placental trophoblast cells attenuates cisplatin-induced acute kidney injury. <i>Life Sciences</i> , 2019, 230, 45-54.	2.0	5
43	On Mammalian Totipotency: What Is the Molecular Underpinning for the Totipotency of Zygote?. <i>Stem Cells and Development</i> , 2019, 28, 897-906.	1.1	10
44	Human blastocyst outgrowths recapitulate primordial germ cell specification events. <i>Molecular Human Reproduction</i> , 2019, 25, 519-526.	1.3	18
45	Synergistic effect of basic fibroblast growth factor (bFGF) and epidermal growth factor on derivation of camel (<i>Camelus dromedarius</i>) trophoblast stem cells. <i>Zygote</i> , 2019, 27, 255-258.	0.5	1
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50	Test-tube embryos - mouse and human development <i>in vitro</i> to blastocyst stage and beyond. <i>International Journal of Developmental Biology</i> , 2019, 63, 203-215.	0.3	15
51	Zfp281 Shapes the Transcriptome of Trophoblast Stem Cells and Is Essential for Placental Development. <i>Cell Reports</i> , 2019, 27, 1742-1754.e6.	2.9	34
52	FGF/ERK signaling pathway: how it operates in mammalian preimplantation embryos and embryo-derived stem cells. <i>International Journal of Developmental Biology</i> , 2019, 63, 171-186.	0.3	14
53	Human placenta and trophoblast development: key molecular mechanisms and model systems. <i>Cellular and Molecular Life Sciences</i> , 2019, 76, 3479-3496.	2.4	414
54	Characterization of 5-methylcytosine and 5-hydroxymethylcytosine in human placenta cell types across gestation. <i>Epigenetics</i> , 2019, 14, 660-671.	1.3	9

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55	Physiological profile of undifferentiated bovine blastocyst-derived trophoblasts. <i>Biology Open</i> , 2019, 8, .	0.6	16
56	Early onset preeclampsia in a model for human placental trophoblast. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 4336-4345.	3.3	55
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63	Opening the black box: Stem cell-based modeling of human post-implantation development. <i>Journal of Cell Biology</i> , 2019, 218, 410-421.	2.3	27
64	Esrrb plays important roles in maintaining self-renewal of trophoblast stem cells (TSCs) and reprogramming somatic cells to induced TSCs. <i>Journal of Molecular Cell Biology</i> , 2019, 11, 463-473.	1.5	19
65	Derivation of Mouse Haploid Trophoblast Stem Cells. <i>Cell Reports</i> , 2019, 26, 407-414.e5.	2.9	16
66	Derivation of Haploid Trophoblast Stem Cells via Conversion In Vitro. <i>IScience</i> , 2019, 11, 508-518.	1.9	24
67	Full of potential: Pluripotent stem cells for the systems biology of embryonic patterning. <i>Developmental Biology</i> , 2020, 460, 86-98.	0.9	17
68	Mechanisms of early placental development in mouse and humans. <i>Nature Reviews Genetics</i> , 2020, 21, 27-43.	7.7	274
69	Specification of the First Mammalian Cell Lineages In Vivo and In Vitro. <i>Cold Spring Harbor Perspectives in Biology</i> , 2020, 12, a035634.	2.3	18
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72	Microphysiological systems of the placental barrier. <i>Advanced Drug Delivery Reviews</i> , 2020, 161-162, 161-175.	6.6	37

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73	Progress in deciphering trophoblast cell differentiation during human placentation. <i>Current Opinion in Cell Biology</i> , 2020, 67, 86-91.	2.6	41
74	Unique features and emerging in vitro models of human placental development. <i>Reproductive Medicine and Biology</i> , 2020, 19, 301-313.	1.0	9
75	Establishment and characterization of a new human first trimester Trophoblast cell line, AL07. <i>Placenta</i> , 2020, 100, 122-132.	0.7	8
76	Primary Cilia in Trophoblastic Cells. <i>Hypertension</i> , 2020, 76, 1491-1505.	1.3	24
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78	TEAD4 ensures postimplantation development by promoting trophoblast self-renewal: An implication in early human pregnancy loss. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 17864-17875.	3.3	95
79	Bioengineered pluripotent stem cell models: new approaches to explore early human embryo development. <i>Current Opinion in Biotechnology</i> , 2020, 66, 52-58.	3.3	8
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85	Keep Calm and the Placenta Will Carry On. <i>Developmental Cell</i> , 2020, 54, 295-296.	3.1	4
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87	The unique applicability of the human placenta to the Adverse Outcome Pathway (AOP) concept: the placenta provides fundamental insights into human organ functions at multiple levels of biological organization. <i>Reproductive Toxicology</i> , 2020, 96, 273-281.	1.3	9
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89	Innate Immune Mechanisms to Protect Against Infection at the Human Decidual-Placental Interface. <i>Frontiers in Immunology</i> , 2020, 11, 2070.	2.2	42
90	New era of trophoblast research: integrating morphological and molecular approaches. <i>Human Reproduction Update</i> , 2020, 26, 611-633.	5.2	17

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99	NLRP7 plays a functional role in regulating BMP4 signaling during differentiation of patient-derived trophoblasts. <i>Cell Death and Disease</i> , 2020, 11, 658.	2.7	17
100	Ultra-high-resolution 3D optical coherence tomography reveals inner structures of human placenta-derived trophoblast organoids. <i>IEEE Transactions on Biomedical Engineering</i> , 2020, 68, 1-1.	2.5	11
101	The Roles of the Histone Protein Modifier EZH2 in the Uterus and Placenta. <i>Epigenomes</i> , 2020, 4, 20.	0.8	6
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116	Tracking placental development in health and disease. <i>Nature Reviews Endocrinology</i> , 2020, 16, 479-494.	4.3	173
117	Naive Human Embryonic Stem Cells Can Give Rise to Cells with a Trophoblast-like Transcriptome and Methylome. <i>Stem Cell Reports</i> , 2020, 15, 198-213.	2.3	129
118	The role of extracellular matrix in normal and pathological pregnancy: Future applications of microphysiological systems in reproductive medicine. <i>Experimental Biology and Medicine</i> , 2020, 245, 1163-1174.	1.1	37
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120	IGF1-mediated human embryonic stem cell self-renewal recapitulates the embryonic niche. <i>Nature Communications</i> , 2020, 11, 764.	5.8	41
121	Review: Histotrophic nutrition and the placental-endometrial dialogue during human early pregnancy. <i>Placenta</i> , 2020, 102, 21-26.	0.7	46
122	Trophoblast lineage-specific differentiation and associated alterations in preeclampsia and fetal growth restriction. <i>Placenta</i> , 2020, 102, 4-9.	0.7	39
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128	Establishment of macaque trophoblast stem cell lines derived from cynomolgus monkey blastocysts. <i>Scientific Reports</i> , 2020, 10, 6827.	1.6	10
129	A Novel Human Placental Barrier Model Based on Trophoblast Stem Cells Derived from Human Induced Pluripotent Stem Cells. <i>Tissue Engineering - Part A</i> , 2020, 26, 780-791.	1.6	12
130	Placental imprinting: Emerging mechanisms and functions. <i>PLoS Genetics</i> , 2020, 16, e1008709.	1.5	50
131	The Transcription Factor OVOL2 Represses ID2 and Drives Differentiation of Trophoblast Stem Cells and Placental Development in Mice. <i>Cells</i> , 2020, 9, 840.	1.8	24
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134	Modeling human embryo development with embryonic and extra-embryonic stem cells. <i>Developmental Biology</i> , 2021, 474, 91-99.	0.9	35
135	Air pollution and pre-eclampsia; associations and potential mechanisms. <i>Placenta</i> , 2021, 104, 188-194.	0.7	15
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137	The promise of placental extracellular vesicles: models and challenges for diagnosing placental dysfunction in utero. <i>Biology of Reproduction</i> , 2021, 104, 27-57.	1.2	7
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140	Isolation of Primary Cytotrophoblasts From Human Placenta at Term. <i>Bio-protocol</i> , 2021, 11, e4185.	0.2	3
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142	The Role of Junctional Adhesion Molecule-C in Trophoblast Differentiation and Function During Pregnancy and Preeclampsia. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
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144	Maintenance of mouse trophoblast stem cells in KSR-based medium allows conventional 3D culture. <i>Journal of Reproduction and Development</i> , 2021, 67, 197-205.	0.5	4
146	Organoids of the female reproductive tract. <i>Journal of Molecular Medicine</i> , 2021, 99, 531-553.	1.7	42

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148	From Snapshots to Development: Identifying the Gaps in the Development of Stem Cell-based Embryo Models along the Embryonic Timeline. <i>Advanced Science</i> , 2021, 8, 2004250.	5.6	5
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150	Progress and challenges in developing organoids in farm animal species for the study of reproduction and their applications to reproductive biotechnologies. <i>Veterinary Research</i> , 2021, 52, 42.	1.1	18
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154	Blastocyst-like structures generated from human pluripotent stem cells. <i>Nature</i> , 2021, 591, 620-626.	13.7	275
156	Organoids as Novel Models for Embryo Implantation Study. <i>Reproductive Sciences</i> , 2021, 28, 1637-1643.	1.1	6
157	Roles of TGF- β 2 Superfamily Proteins in Extravillous Trophoblast Invasion. <i>Trends in Endocrinology and Metabolism</i> , 2021, 32, 170-189.	3.1	52
159	Modelling human blastocysts by reprogramming fibroblasts into iBlastoids. <i>Nature</i> , 2021, 591, 627-632.	13.7	211
160	Modeling human peri-implantation placental development and function. <i>Biology of Reproduction</i> , 2021, 105, 40-51.	1.2	19
162	Stability of Imprinting and Differentiation Capacity in Na A^{ve} Human Cells Induced by Chemical Inhibition of CDK8 and CDK19. <i>Cells</i> , 2021, 10, 876.	1.8	0
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164	Chemically defined and xeno-free culture condition for human extended pluripotent stem cells. <i>Nature Communications</i> , 2021, 12, 3017.	5.8	16
165	Molecular characteristics of established trophoblast-derived cell lines. <i>Placenta</i> , 2021, 108, 122-133.	0.7	22
166	Biomedical and societal impacts of in vitro embryo models of mammalian development. <i>Stem Cell Reports</i> , 2021, 16, 1021-1030.	2.3	13
167	Opportunities and challenges with stem cell-based embryo models. <i>Stem Cell Reports</i> , 2021, 16, 1031-1038.	2.3	52
168	All models are wrong, but some are useful: Establishing standards for stem cell-based embryo models. <i>Stem Cell Reports</i> , 2021, 16, 1117-1141.	2.3	24

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