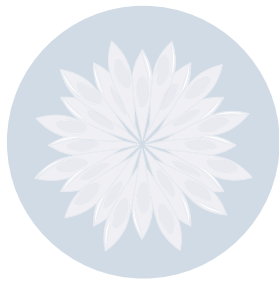
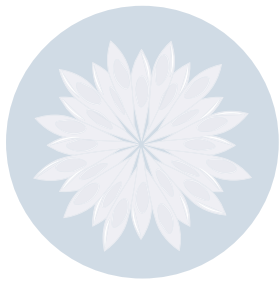


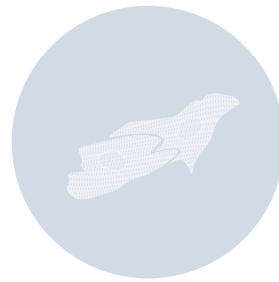
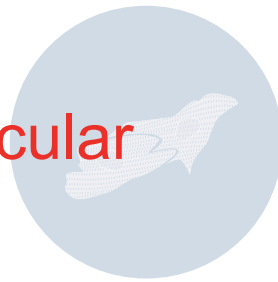
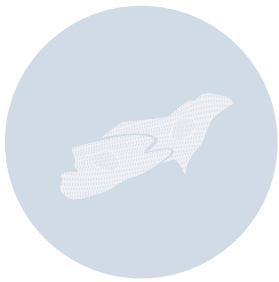


Product Catalog

iPSC-derived cells
primary cells
services



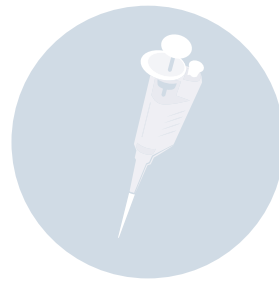
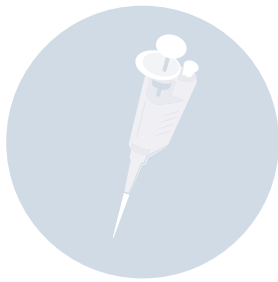
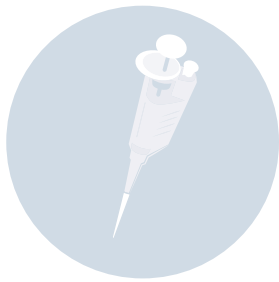
Neuroscience



Cardiovascular



Primary



Services

Overview

Axol Bioscience specialize in the supply of **human cell culture systems** and **custom services** for disease modeling and drug discovery. Our expertise includes induced pluripotent stem cell (iPSC) generation, CRISPR-Cas9 gene editing, iPSC differentiation and custom cell and tissue sourcing.

We offer a variety of functionally validated **human primary cells** and **human iPSC-derived cells** from both healthy and patient donors alongside culture **media and reagents** that are tailored to support the optimal growth and maturation of our cells. This enables you to carry out your project in a physiologically relevant system that is not only reliable and easy to use but produces consistent results for robust replication studies.

Our team is passionate about great science, delivering superb customer service and support and innovating future products to help customers advance their research faster. At Axol, innovation, quality and customer service are key.

www.axolbio.com

Table of Contents

Neuroscience	1
Human iPSC-Derived Cortical Neural Cell Culture	2
iPSC-Derived Neural Stem Cells	2
axoIGEM (Genetically Edited Model) iPSC-Derived Neural Stem Cells	2
Neural Stem Cell Media & Reagents	3
Neural Stem Cell Media & Reagent Bundles	3
Human iPSC-Derived Dopaminergic Neuron Progenitor Culture	4
Human iPSC-Derived Motor Neuron Progenitor Culture	4
Human iPSC-Derived Sensory Neuron Progenitor Culture	4
Human iPSC-Derived Astrocyte Culture	4
Cardiovascular	5
Human iPSC-Derived Cardiomyocyte Culture	6
Human iPSC-Derived Endothelial Colony Forming Cell Culture	6
Primary	7
Human Breast Cancer Cells	8
Human Dental Pulp Stem Cell Culture	8
Human Endothelial Cell Culture	8
Human Epithelial Cell Culture	8
Human Fibroblast Culture	10
Human Hematopoietic Cell Culture	11
Human Liver Cell Culture	13
Human Mesenchymal Stem Cell Culture	14
Human Muscle Cell Culture	14
Human Pericyte Culture	14
Services	15
Custom Cell & Tissue Sourcing	16
Cells & Tissues from Healthy Donors	17
Cells & Tissues from Patient Donors	18
Custom Reprogramming	19
iPSC Genome Editing	20
iPSC Differentiation	21
Distributors	22



Neuroscience

Our neuroscience range includes human iPSC-derived neural stem cells, cerebral cortical neurons, dopaminergic neuron progenitors, sensory neuron progenitors, motor neuron progenitors and astrocytes from healthy and patient donors. Our isogenic disease models are suitable for investigating the effect of *MAPT* and *LRRK2* mutations in neurodegenerative conditions including Alzheimer's disease, frontotemporal dementia and Parkinson's disease. We also offer tailored media and reagents to support the optimal culture of all our neural and glial cells.



Human iPSC-Derived Cortical Neural Cell Culture

ax0001	Cortical Neural Induction Kit	Media & reagents to differentiate human pluripotent stem cells to cerebral cortical neural stem cells in just 16 days
--------	-------------------------------	---

iPSC-Derived Neural Stem Cells

ax0011	Neural Stem Cells	1.5 x 10 ⁶ cells	Male	Newborn	Healthy
ax0015	Neural Stem Cells	1.5 x 10 ⁶ cells	Male	Newborn	Healthy
ax0016	Neural Stem Cells	1.5 x 10 ⁶ cells	Female	Newborn	Healthy
ax0018	Neural Stem Cells	1.5 x 10 ⁶ cells	Male	74 years	Healthy
ax0019	Neural Stem Cells	1.5 x 10 ⁶ cells	Female	64 years	Healthy
ax0020	Neural Stem Cells	1.5 x 10 ⁶ cells	Male	Newborn	Healthy
ax0111	Neural Stem Cells	1.5 x 10 ⁶ cells	Female	87 years	Alzheimer's (APOE4)
ax0112	Neural Stem Cells	1.5 x 10 ⁶ cells	Female	38 years	Alzheimer's (PSEN-1 L286V)
ax0113	Neural Stem Cells	1.5 x 10 ⁶ cells	Male	53 years	Alzheimer's (PSEN-1 M146L)
ax0114	Neural Stem Cells	1.5 x 10 ⁶ cells	Female	31 years	Alzheimer's (PSEN-1 A246E)
ax0115	Neural Stem Cells	1.5 x 10 ⁶ cells	Female	81 years	Alzheimer's (PSEN-2 N141I)
ax0211	Neural Stem Cells	1.5 x 10 ⁶ cells	Female	48 years	Huntington's
ax0411	Neural Stem Cells	1.5 x 10 ⁶ cells	Female	5 months	Epilepsy
ax1001	Neural Stem Cells	1.5 x 10 ⁶ cells	Female	74 years	Trisomy X

All iPSC-Derived Cerebral Cortical Neurons are available in 96-well plate format

axoIGEM (Genetically Edited Model) iPSC-Derived Neural Stem Cells

ax0019	Neural Stem Cells	1.5 x 10 ⁶ cells	Female	64 years	Isogenic control
ax0310	Neural Stem Cells	1.5 x 10 ⁶ cells	Female	64 years	LRRK2 G2019S HOM
ax0311	Neural Stem Cells	1.5 x 10 ⁶ cells	Female	64 years	LRRK2 G2019S HET
ax0320	Neural Stem Cells	1.5 x 10 ⁶ cells	Female	64 years	MAPT R406W HOM
ax0321	Neural Stem Cells	1.5 x 10 ⁶ cells	Female	64 years	MAPT R406W HET
ax0322	Neural Stem Cells	1.5 x 10 ⁶ cells	Female	64 years	MAPT V337M HOM
ax0323	Neural Stem Cells	1.5 x 10 ⁶ cells	Female	64 years	MAPT V337M HET
ax0324	Neural Stem Cells	1.5 x 10 ⁶ cells	Female	64 years	MAPT P301L HOM
ax0325	Neural Stem Cells	1.5 x 10 ⁶ cells	Female	64 years	MAPT P301L HET



Neural Stem Cell Media & Reagents

ax0030-500	Neural Expansion-XF Medium	Fully defined growth medium for neural stem cell expansion
ax0034-125	Neural Differentiation-XF Medium	Fully defined medium for synchronous differentiation of neural stem cells to cerebral cortical neurons
ax0032-500	Neural Maintenance-XF Medium	Optimized to support low-density culture & long-term functional maturation
ax0033	Neural Plating-XF Medium	Optimized to support maximum cell recovery after thawing & passaging
ax0041	SureBond	Coating solution providing an optimal surface for feeder-free growth & adherence
ax0053	SureBond-XF	Xeno-free coating solution for endpoint assays on plastic
ax0052	SureBond+ReadySet	Coating reagents required for endpoint assays on glass
ax0044	Unlock	Fully defined & gentle detachment buffer
ax0047	Recombinant Human FGF2	Required for supplementation of Neural Expansion-XF Medium
ax0048	Recombinant Human EGF	Required for supplementation of Neural Expansion-XF Medium
ax0049	Fibronectin Coating Solution	Promotes the attachment of a wide variety of cell types
ax0051	ReadyFect	Powerful lipid-based transfection reagent

Neural Stem Cell Media & Reagent Bundles

ax0101	Expansion and Synchronous Differentiation (System A)	Expand & synchronously differentiate neural stem cells & maintain the differentiated neurons
ax0102	Synchronous Differentiation (System B)	Synchronously differentiate neural stem cells & maintain the differentiated neurons
ax0103	Expansion and Spontaneous Differentiation (System C)	Expand & spontaneously differentiate neural stem cells & maintain the differentiated neuronal & glial cells
ax0104	Spontaneous Differentiation (System D)	Spontaneously differentiate neural stem cells & maintain the differentiated neuronal & glial cells

SynaptoBoost Neural Maturation Kit

Synaptogenesis media to accelerate the maturation of electrically active neurons



Human iPSC-Derived Dopaminergic Neuron Progenitor Culture

ax0091	Dopaminergic Neuron Progenitor Kit	1 x 10 ⁶ cells	Male	Newborn	Healthy. Media & supplements
ax0092	Dopaminergic Neuron Maintenance Medium				Serum-free medium to promote the viability & maturation of dopaminergic neurons

Human iPSC-Derived Motor Neuron Progenitor Culture

ax0078	Motor Neuron Progenitors	Please inquire	Male	74 years	Healthy
ax0071	Motor Neuron Recovery Medium				Promotes viability of motor neuron progenitors
ax0072	Motor Neuron Maintenance Medium				For the maintenance of motor neurons

Human iPSC-Derived Sensory Neuron Progenitor Culture

ax0055	Sensory Neuron Progenitors	5 x 10 ⁵ cells	Male	Newborn	Healthy
ax0060	Sensory Neuron Maintenance Medium				Promotes viability & maturation of sensory neuron progenitors

Human iPSC-Derived Astrocyte Culture

ax0083	Astrocyte Progenitor Kit	1 x 10 ⁶ cells	Male	Newborn	Healthy. Media & supplements
ax0084	Mature Astrocyte Kit	1 x 10 ⁶ cells	Male	Newborn	Healthy. Media & supplements

Cardiovascular

Our cardiovascular range includes human iPSC-derived ventricular cardiomyocytes, atrial cardiomyocytes and endothelial colony forming cells.

We also offer tailored media and reagents to support the maintenance and expansion all cells in our cardiovascular range.



Human iPSC-Derived Cardiomyocyte Culture

ax2505	Ventricular Cardiomyocytes	1 x 10 ⁶ cells	Male	Newborn	Healthy
ax2515	Atrial Cardiomyocytes	Please inquire	Male	Newborn	Healthy
ax2530-500	Cardiomyocyte Maintenance Medium				Fully defined, serum-free medium tailored to support the optimal growth of cardiomyocytes
ax0049	Fibronectin Coating Solution				Promotes the attachment of a wide variety of cell types
ax0044	Unlock				Fully defined detachment buffer

Human iPSC-Derived Endothelial Colony Forming Cell Culture

ax2015	Endothelial Colony Forming Cells	Please inquire	Male	Newborn	Healthy
ax2019	Endothelial Colony Forming Cells	1 x 10 ⁶ cells	Female	64 years	Healthy
ax2030	Endothelial Colony Forming Cell Culture Medium				Xeno-free medium for the expansion & maintenance of endothelial colony forming cells
ax0049	Fibronectin Coating Solution				Promotes the attachment of a wide variety of cell types
ax0044	Unlock				Fully defined detachment buffer
ax2215	Endothelial Colony Forming Cell Kit	Please inquire	Male	Newborn	Healthy. Media & supplements
ax2219	Endothelial Colony Forming Cell Kit	1 x 10 ⁶ cells	Female	64 years	Healthy. Media & supplements

Primary Cells

We provide a variety of human primary cells from both healthy and patient donors. These include endothelial cells, fibroblasts, epithelial cells, pericytes, hematopoietic cells, dental pulp stem cells, liver cells, mesenchymal stem cells, muscle cells and drug-resistant breast cancer cells.

Our range of optimized media are tailored to support your research offering you complementary culture solutions to thaw, plate, maintain or differentiate your cells *in vitro*.



Human Breast Cancer Cells

ax4010	Parental MCF7 Cells (MCF7/S0.5)	1 x 10 ⁶ cells
ax4011	Tamoxifen-Resistant MCF7 Cells (MCF7/TAMR-4)	1 x 10 ⁶ cells
ax4012	Tamoxifen-Resistant MCF7 Cells (MCF7/TAMR-8)	1 x 10 ⁶ cells
ax4013	Fulvestrant-Resistant MCF7 Cells (MCF7/182R-6)	1 x 10 ⁶ cells

Human Dental Pulp Stem Cell Culture

ax3901	Dental Pulp Stem Cells	1 x 10 ⁶ cells
ax3902	Dental Pulp Stem Cell Culture Medium	500 mL

Human Endothelial Cell Culture

ax3801	Dermal Microvascular Endothelial Cells	5 x 10 ⁵ cells
ax3802	Dermal Microvascular Endothelial Cell Culture Medium	500 mL
ax3805	Aortic Endothelial Cells	5 x 10 ⁵ cells
ax3806	Coronary Artery Endothelial Cells	5 x 10 ⁵ cells
ax3808	Iliac Artery Endothelial Cells	5 x 10 ⁵ cells
ax3807	Pulmonary Artery Endothelial Cells	5 x 10 ⁵ cells
ax3810	Artery Endothelial Cell Culture Medium	500 mL
ax3811	Umbilical Vein Endothelial Cells	5 x 10 ⁵ cells
ax3812	Umbilical Vein Endothelial Cell Culture Medium	500 mL

Human Epithelial Cell Culture

ax3502	Corneal Epithelial Cells	5 x 10 ⁵ cells
ax3533	Corneal Epithelial Cell Culture Medium	500 mL
ax3515	Bronchial/Tracheal Airway Epithelial Cells	5 x 10 ⁵ cells
ax3001	Large Airway Epithelial Cells	5 x 10 ⁵ cells
ax3002	Small Airway Epithelial Cells	5 x 10 ⁵ cells
ax0035	Airway Epithelial Cell Culture Medium	500 mL



Human Epithelial Cell Culture cont.

ax3555	Gingival Epithelial Cells	5 x 10 ⁵ cells
ax3556	Gingival Epithelial Cell Culture Medium	500 mL
ax3525	Keratinocytes (Pooled Donors)	5 x 10 ⁵ cells
ax3526	Keratinocytes (Single Donor, Juvenile)	5 x 10 ⁵ cells
ax3527	Keratinocytes (Single Donor, Adult)	5 x 10 ⁵ cells
ax3528	Keratinocyte Cell Culture Medium	500 mL
ax3560	Keratinocyte 3D Culture Medium	500 mL
ax3570	Keratinocyte 3D Culture Starter Kit	5 x 10 ⁵ cells. Media & inserts
ax3529	Melanocytes (Single Donor, Juvenile)	5 x 10 ⁵ cells
ax3530	Melanocytes (Single Donor, Adult)	5 x 10 ⁵ cells
ax3531	Melanocyte Growth Medium	500 mL
ax3532	Melanocyte Differentiation Medium	250 mL
ax3542	Melanocyte Assay Medium	250 mL
ax3512	Mammary Epithelial Cells (Male)	5 x 10 ⁵ cells
ax3513	Mammary Epithelial Cells (Female)	5 x 10 ⁵ cells
ax3537	Mammary Epithelial Cell Culture Medium	500 mL
ax3507	Prostate Epithelial Cells	5 x 10 ⁵ cells
ax3541	Prostate Epithelial Cell Culture Medium	500 mL
ax3008	Bladder Epithelium Progenitors, Immortalized	5 x 10 ⁵ cells
ax0039	Bladder Epithelial Cell Culture Medium	500 mL
ax3503	Renal Cortical Epithelial Cells	5 x 10 ⁵ cells
ax3506	Renal Medullary Epithelial Cells	5 x 10 ⁵ cells
ax3007	Renal Proximal Tubule Epithelial Cells	5 x 10 ⁵ cells
ax3505	Renal Mixed Epithelial Cells	5 x 10 ⁵ cells
ax3534	Renal Epithelial Cell Culture Medium	500 mL



Human Fibroblast Culture

ax3027	Dermal Fibroblasts (Adult)	5 x 10 ⁵ cells
ax3037	Dermal Fibroblasts (Neonatal)	5 x 10 ⁵ cells
ax3011	Dermal Fibroblasts, Amyotrophic Lateral Sclerosis Patient	5 x 10 ⁵ cells
ax3012	Dermal Fibroblasts, Arteriovenous Malformation Patient	5 x 10 ⁵ cells
ax3010	Dermal Fibroblasts, Astrocytoma Patient	5 x 10 ⁵ cells
ax3013	Dermal Fibroblasts, Duchenne Muscular Dystrophy Patient	5 x 10 ⁵ cells
ax3016	Dermal Fibroblasts, Glioblastoma Patient	5 x 10 ⁵ cells
ax3015	Dermal Fibroblasts, Guillain Barre Syndrome Patient	5 x 10 ⁵ cells
ax3017	Dermal Fibroblasts, Huntington's Disease Patient	5 x 10 ⁵ cells
ax3018	Dermal Fibroblasts, Legg-Calve-Perthes Syndrome Patient	5 x 10 ⁵ cells
ax3019	Dermal Fibroblasts, Mucopolysaccharidosis Patient	5 x 10 ⁵ cells
ax3020	Dermal Fibroblasts, Neurofibromatosis Patient	5 x 10 ⁵ cells
ax3021	Dermal Fibroblasts, Parkinson's Disease Patient	5 x 10 ⁵ cells
ax3022	Dermal Fibroblasts, Psoriasis Patient	5 x 10 ⁵ cells
ax3023	Dermal Fibroblasts, Rheumatoid Arthritis Patient	5 x 10 ⁵ cells
ax3024	Dermal Fibroblasts, Systemic Lupus Erythematosus Patient	5 x 10 ⁵ cells
ax3025	Dermal Fibroblasts, Transverse Myelitis Patient	5 x 10 ⁵ cells
ax3014	Dermal Fibroblasts, Type 1 Diabetes Patient	5 x 10 ⁵ cells
ax3040	Dermal Fibroblasts, Type 2 Diabetes Patient	5 x 10 ⁵ cells
ax3034	Bladder Fibroblasts (Adult)	5 x 10 ⁵ cells
ax3039	Cardiac Fibroblasts (Adult)	5 x 10 ⁵ cells
ax3030	Kidney Fibroblasts (Adult)	5 x 10 ⁵ cells
ax3038	Lung Fibroblasts (Adult)	5 x 10 ⁵ cells
ax3033	Mammary Fibroblasts (Adult)	5 x 10 ⁵ cells
ax3032	Muscle Fibroblasts (Adult)	5 x 10 ⁵ cells
ax3031	Thyroid Fibroblasts (Adult)	5 x 10 ⁵ cells
ax3035	Uterine Fibroblasts (Adult)	5 x 10 ⁵ cells
ax3036	Vas Deferens Fibroblast (Adult)	5 x 10 ⁵ cells
ax3045	Human Fibroblast Plating & Growth Medium	500 mL
ax3103-500	Human Fibroblast Cell Culture Medium (Animal Component-Free)	500 mL



Human Hematopoietic Cell Culture

ax3400	Cord Blood CD34+ Cells (Pooled)	1 x 10 ⁵ cells
ax3401	Cord Blood CD133+ Progenitor Cells	1 x 10 ⁵ cells
ax3402	Cord Blood CD34+/CD38- Progenitor Cells (Pooled)	1 x 10 ⁵ cells
ax3403	Cord Blood CD4+ Naive T Helper Cells	1 x 10 ⁶ cells
ax3404	Cord Blood CD4+ T Helper Cells	5 x 10 ⁶ cells
ax3425	Cord Blood Mononuclear Cells (CBMCs)	1 x 10 ⁷ cells
ax3414	Peripheral Blood CD1c+ (BDCA-1+) Myeloid Dendritic Cells	5 x 10 ⁵ cells
ax3409	Peripheral Blood CD3+ T cells	5 x 10 ⁶ cells
ax3407	Peripheral Blood CD4+ T Helper Cells, Naive	1 x 10 ⁶ cells
ax3408	Peripheral Blood CD4+ T Helper Cells	5 x 10 ⁶ cells
ax3410	Peripheral Blood CD8+ Cytotoxic T Cells, Naive	1 x 10 ⁶ cells
ax3450	Peripheral Blood CD8+ Cytotoxic T Cells	5 x 10 ⁶ cells
ax3413	Peripheral Blood CD14+ Monocytes	5 x 10 ⁶ cells
ax3406	Peripheral Blood CD19+ B Cells	1 x 10 ⁶ cells
ax3411	Peripheral Blood CD25+ Regulatory T Cells	2 x 10 ⁶ cells
ax3412	Peripheral Blood CD56+ Natural Killer Cells	5 x 10 ⁶ cells
ax3405	Peripheral Blood Mobilized CD34+ Cells	5 x 10 ⁶ cells
ax3418-15M	Peripheral Blood Mononuclear Cells (PBMCs), 15 million cells	1.5 x 10 ⁷ cells
ax3418-100M	PBMCs, 100 million cells	1 x 10 ⁸ cells
ax3417	PBMCs, Acute Lymphoblastic Leukemia	1 x 10 ⁷ cells
ax3420	PBMCs, Acute Myeloid Leukemia	1 x 10 ⁷ cells
ax3421	PBMCs, Chronic Lymphocytic Leukemia	1 x 10 ⁷ cells
ax3415	PBMCs, Crohn's Disease	Please inquire
ax3416	PBMCs, Multiple Myeloma	Please inquire
ax3423	PBMCs, Non-Hodgkin's Lymphoma	1 x 10 ⁷ cells
ax3424	PBMCs, Rheumatoid Arthritis	1 x 10 ⁷ cells
ax3419	PBMCs, Type 2 Diabetes	1.5 x 10 ⁷ cells



Human Hematopoietic Cell Culture cont.

ax3426	Bone Marrow CD34+ Progenitor Cells	5 x 10 ⁵ cells
ax3451	Bone Marrow Mononuclear Cells (BMMCs)	1 x 10 ⁷ cells
ax3429	BMMCs, Acute Lymphoblastic Leukemia Patient	1 x 10 ⁷ cells
ax3430	BMMCs, Acute Myeloid Leukemia Patient	1 x 10 ⁷ cells
ax3428	BMMCs, Autoimmune Hemolytic Anemia Patient	1 x 10 ⁷ cells
ax3431	BMMCs, Chronic Lymphocytic Leukemia Patient	1 x 10 ⁷ cells
ax3433	BMMCs, Chronic Myeloid Leukemia (Ph negative) Patient	1 x 10 ⁷ cells
ax3432	BMMCs, Chronic Myeloid Leukemia (Ph positive) Patient	1 x 10 ⁷ cells
ax3434	BMMCs, Dilated Cardiomyopathy Patient	1 x 10 ⁷ cells
ax3436	BMMCs, Essential Thrombocytosis Patient	1 x 10 ⁷ cells
ax3437	BMMCs, Idiopathic Thrombocytopenia Patient	1 x 10 ⁷ cells
ax3438	BMMCs, Leukopenia Anemia Patient	1 x 10 ⁷ cells
ax3439	BMMCs, Lymphoproliferative Syndrome Patient	1 x 10 ⁷ cells
ax3440	BMMCs, Muscular Dystrophy Patient	1 x 10 ⁷ cells
ax3441	BMMCs, Myelodysplastic Syndrome Patient	1 x 10 ⁷ cells
ax3443	BMMCs, Non-Hodgkin's Lymphoma Patient	1 x 10 ⁷ cells
ax3445	BMMCs, Pancytopenia Patient	1 x 10 ⁷ cells
ax3444	BMMCs, Plasmacytoma Patient	1 x 10 ⁷ cells
ax3446	BMMCs, Polycythemia Patient	1 x 10 ⁷ cells
ax3447	BMMCs, Severe Iron Deficiency Anemia Patient	1 x 10 ⁷ cells
ax3448	BMMCs, Thrombocytopenia Patient	1 x 10 ⁷ cells
ax3435	BMMCs, Type 2 Diabetes Patient	1 x 10 ⁷ cells
ax3455	Leukocyte Plating & Maintenance Medium	100 mL
ax3460	Mononuclear Cell Maintenance Medium	100 mL



Human Liver Cell Culture

ax3701	Assay-Ready Expanded (ARE) Hepatocytes	5 x 10 ⁶ cells
ax3702	ARE Hepatocytes, CYP2D6 Overexpressing	5 x 10 ⁶ cells
ax3703	ARE Hepatocytes, Genotoxicity Assay Validated	1 x 10 ⁶ cells
ax3704	ARE Hepatocyte Starter Kit	5 x 10 ⁶ cells, 50 mL Thawing Medium, 500 mL Maintenance Medium, 5 Collagen-Coated Plates
ax3705	ARE Hepatocyte Thawing Medium	50 mL
ax3710	ARE Hepatocyte Maintenance Medium	500 mL
ax3715	ARE Hepatocyte Genotoxicity Assay Medium	500 mL
ax3720	Assay-Ready Expanded (ARE) Liver Sinusoidal Endothelial Cells	5 x 10 ⁶ cells
ax3721	ARE Liver Sinusoidal Endothelial Cell Culture Medium	100 mL
ax3722	ARE Liver Sinusoidal Endothelial Cell Starter Kit	5 x 10 ⁶ cells, 100 mL Culture Medium, 5 Collagen-Coated Plates
ax3750	Uncultured Hepatocytes	5 x 10 ⁶ cells *Lot-dependent
ax3751	Uncultured Hepatocyte Plating Medium	250 mL
ax3752	Uncultured Hepatocyte Maintenance Medium	250 mL
ax3753	Uncultured Hepatocyte Starter Kit	5 x 10 ⁶ cells, 250 mL Plating Medium, 250 mL Maintenance Medium, 5 Collagen-Coated Plates
ax3755	Uncultured Kupffer Cells	1 x 10 ⁶ cells
ax3756	Uncultured Kupffer Cell Plating Medium	250 mL
ax3757	Uncultured Kupffer Cell Maintenance Medium	250 mL
ax3758	Uncultured Kupffer Cell Starter Kit	1 x 10 ⁶ cells, 250 mL Plating Medium, 250 mL Maintenance Medium, 5 Collagen-Coated Plates
ax3760	Hepatic Stellate Cells	1 x 10 ⁵ cells
ax3761	Hepatic Stellate Cell Culture Medium	250 mL
ax3762	Hepatic Stellate Cell Starter Kit	1 x 10 ⁵ cells, 250 mL Culture Medium, 5 Collagen-Coated Plates
ax3765	Intra-Hepatic Biliary Epithelial Cells	5 x 10 ⁵ cells
ax3766	Intra-Hepatic Biliary Epithelial Cell Culture Medium	500 mL
ax3767	Intra-Hepatic Biliary Epithelial Cell Starter Kit	5 x 10 ⁵ cells, 500 mL Culture Medium, 5 Collagen-Coated Plates



Human Mesenchymal Stem Cell Culture

ax9004	Mesenchymal Stem Cells (MSCs) (Pre-Adipocytes)	1 x 10 ⁶ cells
ax9001	MSCs (Adipose Tissue-Derived)	1 x 10 ⁶ cells
ax9003	MSCs (Umbilical Cord-Derived)	5 x 10 ⁵ cells
ax9002	MSCs (Bone Marrow-Derived)	1 x 10 ⁶ cells
ax9016	MSCs (Bone Marrow-Derived), Amyotrophic Lateral Sclerosis Patient	5 x 10 ⁵ cells
ax9018	MSCs (Bone Marrow-Derived), Muscular Dystrophy Patient	5 x 10 ⁵ cells
ax9017	MSCs (Bone Marrow-Derived), Type 2 Diabetes Patient	5 x 10 ⁵ cells
ax9007	MSC Expansion Medium for Pre-Adipocyte MSCs	500 mL
ax9005	MSC Expansion Medium for Adipose Tissue-Derived & Umbilical Cord-Derived MSCs	500 mL
ax9006	MSC Expansion Medium for Bone Marrow-Derived MSCs	500 mL
ax9008	MSC Adipogenesis Medium for Adipose Tissue-Derived & Pre-Adipocyte MSCs	100 mL
ax9019	MSC Adipogenesis Medium for Bone Marrow-Derived & Umbilical Cord-Derived MSCs	100 mL
ax9009	MSC Chondrogenesis Medium	100 mL
ax9010	MSC Osteogenesis Medium	100 mL

Human Muscle Cell Culture

ax3050	Skeletal Muscle Progenitor Cells (Adult)	5 x 10 ⁵ cells
ax3051	Skeletal Muscle Cells (Adult)	5 x 10 ⁵ cells
ax3054	Skeletal Muscle Progenitor Cells, Duchenne Muscular Dystrophy Patient	5 x 10 ⁵ cells
ax3055	Skeletal Muscle Cells, Duchenne Muscular Dystrophy Patient	5 x 10 ⁵ cells
ax3060	Skeletal Muscle Cell Culture Medium	500 mL
ax3061	Skeletal Muscle Differentiation Medium	500 mL
ax3070	Aortic Smooth Muscle Cells	5 x 10 ⁵ cells
ax3071	Coronary Artery Smooth Muscle Cells	5 x 10 ⁵ cells
ax3072	Pulmonary Artery Smooth Muscle Cells	5 x 10 ⁵ cells
ax3073	Lung Smooth Muscle Cells	5 x 10 ⁵ cells
ax3074	Bronchial/Tracheal Smooth Muscle Cells	5 x 10 ⁵ cells
ax3075	Bladder Smooth Muscle Cells	5 x 10 ⁵ cells
ax3076	Uterine Smooth Muscle Cells	5 x 10 ⁵ cells
ax3080	Smooth Muscle Cell Culture Medium	500mL

Human Pericyte Culture

ax3009	Human Pericytes	5 x 10 ⁵ cells
ax0040	Pericyte Growth Medium	500 mL

Custom Services

Our custom services can be tailored to meet your experimental requirements, helping you to save time and resources.

We can source specific cells and tissues from both healthy donors and patients across a wide variety of disease indications. Our custom reprogramming protocols enable us to generate footprint-free iPSCs from your donor cells. We can also carry out CRISPR-Cas9 gene editing on your iPSCs and use our highly validated methods to direct the differentiation of iPSCs to your cell type of interest.



Custom Cell & Tissue Sourcing

Finding the right cells for your experiments can be difficult, especially when studying rare diseases or when specific donor inclusion/exclusion criteria are required. Primary human cells and tissue can be particularly difficult to source but are highly relevant cellular models that better reflect the biology of the tissue or disease.

We specialize in sourcing primary cancer tissue for a broad range of cancers. Many of the samples are collected prior to treatment so the tissue is treatment naive. This reduces potential confounding variables when studying the effects of anti-cancer compounds on primary cancer cells.

We can also source biological specimens such as blood and tissues for a wide range of clinical indications including autoimmune, neurological, pulmonary, cardiovascular, skin, kidney and bladder disorders, and liver cirrhosis.

All biospecimens are:

- Anonymized
- Obtained with fully informed consent from the donor or donor's next-of-kin with ethics committee or IRB approval
- Screened for human pathogens such as HIV and hepatitis viruses
- Provided as tissue samples either fresh frozen or formalin-fixed, paraffin-embedded

A complete list of our capabilities is available on pages 17 and 18.



Cells & Tissues from Healthy Donors

Adrenal Gland	Ileum	Skin
Aorta	Jejunum	Spinal Cord
Arteries	Kidney	Spleen
Blood Cells	Liver	Stomach
Bone Marrow	Lung	Synovial Membrane
Brain Cerebellum	Lymph Node	Testis
Brain Cortex	Ovary	Thyroid Gland
Breast	Parotid Gland	Tonsil
Colon	Pancreas	Umbilical Cord
Cord Blood	Peripheral Nerves	Ureter
Duodenum	Pituitary Gland	Urinary Bladder
Esophagus	Placenta	Uterus Cervix
Fallopian Tube	Prostate Gland	Uterus Endometrium
Gall Bladder	Salivary Gland	Veins
Heart	Skeletal Muscle	

We can also help you to source donor cells & tissues not listed here!



Cells & Tissues from Patient Donors

Acute Lymphocytic Leukemia
Acute Myeloid Leukemia
Adrenal Cancer
Allergies
Alzheimer's Disease
Appendicitis
Arteriosclerosis
Arthritis
Asthma
Astrocytoma
Bladder Cancer
Breast Ductal Carcinoma
Breast Lobular Carcinoma
Breast Ductal Carcinoma In Situ
Breast Cancer Luminal B
Breast Cancer Triple Negative
Breast Cancer Herceptin-Treated
Breast Cancer Tamoxifen-Treated
Cervical Adenocarcinoma
Cervical Squamous Cell Carcinoma
Cholecystitis
Chondrosarcoma
Chronic Lymphocytic Leukemia
Chronic Myeloid Leukemia
Chronic Obstructive Pulmonary Disease
Cirrhosis
Colitis
Collagenosis
Colon Polyp (Benign)
Colorectal Cancer
Crohn's Disease
Cystitis
Dementia
Depression
Dermatitis
Diabetes (Type 1)
Diabetes (Type 2)
Endometrial Cancer
Esophageal Cancer
Esophagitis
Ewing's Sarcoma
Gall Bladder Cancer
Gastritis
Gastrointestinal Stromal Tumor
Glioblastoma
Head and Neck Cancer
Heart Disease
Hepatitis
Hodgkin's Lymphoma
Huntington's Disease
Liposarcoma
Liver Cholangiocarcinoma
Liver Hepatocellular Carcinoma
Lung Cancer (Non-Small Cell)
Lung Cancer (NSC Large Cell Carcinoma)
Lung Cancer (Small Cell)
Lung Carcinoid
Melanoma
Meningitis
Merkel Cell Carcinoma
Multiple Myeloma
Multiple Sclerosis
Myocardial Infarction
Nephritis
Neuroblastoma
Non-Hodgkin's Lymphoma
Ovarian Carcinoma (Clear Cell)
Ovarian Carcinoma (Endometrioid)
Ovarian Carcinoma (Mucinous)
Ovarian Carcinoma (Serous)
Ovarian Germ Cell Cancer
Pancreatic Cancer
Pancreatic Carcinoid
Pancreatitis
Parkinson's Disease
Pneumonia
Pre-Eclampsia
Prostate Cancer (Adenocarcinoma)
Prostate Cancer (Androgen-Independent)
Prostate Hyperplasia
Prostatitis
Psoriasis
Renal Carcinoma (Chromaphobe)
Renal Carcinoma (Clear Cell)
Renal Carcinoma (Papillary)
Rhabdomyosarcoma
Schizophrenia
Skin Carcinoma (Basal Cell)
Skin Carcinoma (Squamous Cell)
Skin Nevi (Benign)
Small Intestine Carcinoid
Soft Tissue Sarcomas
Spleen Cancer
Stomach Adenocarcinoma
Stomach Carcinoma
Stroke
Systemic Lupus Erythematosus
Testicular Cancer (Seminoma)
Testicular Germ Cell Cancer
Thymus Cancer
Thyroid Adenoma
Thyroid Carcinoma (Follicular)
Thyroid Carcinoma (Medullary)
Thyroid Carcinoma (Papillary)
Tuberculosis
Uterine Cancer
Vulval Cancer



Custom Reprograming

We offer a complete suite of reprogramming and characterization services. Our services empower you to focus on your research interests and not consume valuable time and resources generating cells.

Simply send us your donor cells (fibroblasts or PBMCs) and we'll use non-integrating episomal or viral methods to produce induced pluripotent stem cells (iPSCs) within a short period of time.

Once you receive the iPSCs from us, our dedicated specialists will share their expertise and provide ongoing support to facilitate adaptation of the cells in your experimental systems.

Our reprogramming service includes:

- Recovery, passaging, initial testing and banking of donor fibroblasts or PBMCs
- Cells will be transfected with episomal plasmid vectors or transduced with non-integrating Sendai virus reprogramming particles
- Analysis of pluripotency using immunocytochemistry and TaqMan® hPSC Scorecard™ Assay

We can also help you source donor samples that meet your experimental requirements!



iPSC Genome Editing

We create isogenic and reporter cell lines for disease modeling and drug discovery.

Cellular reprogramming and directed differentiation of iPSCs offer the possibility of generating many disease-relevant cell types from any genetic background. By combining the power of CRISPR-Cas9 genome editing from Horizon Discovery with our iPSC technology, we can create accurate cellular models of genetic conditions by introducing disease-causing mutations into healthy control cell lines, or correct those mutations in genomes of disease-derived cells to provide the matched control cell line.

Genetically edited iPSC-derived models can help researchers better understand how specific genes contribute to disease pathogenesis at the molecular and cellular level in a tissue-specific nature. Furthermore, they represent valuable platforms for identifying drug targets and studying drug mechanisms of action, paving the way for developing new therapeutic interventions for many currently untreatable genetic diseases.

Our custom iPSC genome editing service includes:

- Optimized and highly efficient gene editing workflow for iPSCs
- Screening a selection of gRNAs and resulting cell clones
- Sequence verification of genotypes engineered:
 - Homozygous and heterozygous knockouts
 - Homozygous and heterozygous point mutations
 - Tagged reporter cell lines
- Pluripotency assessment of gene-edited cell lines



iPSC Differentiation

We provide cost-effective services to generate multiple cell types from your iPSCs. Our protocols are tailored for large scale production of a number of neural and cardiovascular cell types.

We apply fully defined differentiation culture conditions in order to achieve a high differentiation efficiency, high purity and minimal lot-to-lot variation in a short period of time.

Our dedicated specialists are available to share their expertise and provide ongoing support to facilitate adaptation of the cells in your experimental systems.

Our iPSC differentiation capabilities include:

- Directed differentiation of iPSCs to neural stem cells, cerebral cortical neurons, sensory neurons, cardiomyocytes and many more cell types
- Characterization of all iPSC-derived cells using immunohistochemistry to confirm the expression of lineage-specific markers
- Rigorous quality control checks to ensure all cells are free from contaminants and achieve satisfactory post-thaw viability prior to shipping
- Ongoing technical support and a range of tailored media to ensure the optimal culture of all our iPSC-derived cells

Distributors



India
Japan
Singapore
South Korea
Taiwan

Biotron Healthcare Ltd
Cosmo Bio
Bio-Rev
KomaBiotech
Biogenes Science, Inc

www.biotronhealthcare.com
www.cosmobio.co.jp
www.bio-rev.com
www.komabiotech.com
www.biogenesis.com.tw





Address

**Axol Bioscience Limited | Suite 3 | The Science Village |
Chesterford Research Park | Little Chesterford | Cambridgeshire | CB10 1XL**

International phone

+44-1223-751-051

US phone

+1-800-678-AXOL (2965)

Email

support@axolbio.com

Web

www.axolbio.com

