Resource Summary Report

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IPS(IMR90)-4

RRID:CVCL_C437
Type: Cell Line

Proper Citation

(WiCell Cat# ips-imr90-4, RRID:CVCL_C437)

Cell Line Information

URL: https://web.expasy.org/cellosaurus/CVCL_C437

Proper Citation: (WiCell Cat# ips-imr90-4, RRID:CVCL_C437)

Sex: Female

Defining Citation: PMID:18029452, PMID:22905176, PMID:30044992, PMID:32946783, PMID:36261438

Comments: Omics: Transcriptome analysis by RNAseq., Omics: Transcriptome analysis by microarray., Population: Caucasian., From: University of Wisconsin; Madison; USA.

Category: Induced pluripotent stem cell

Name: IPS(IMR90)-4

Synonyms: iPS(IMR90)-4, iPS(IMR90) clone (#4), iPS(IMR90)-4-DL-01, iPS-IMR90-4, IMR90-4, IMR4, WISCi004-B

Cross References: BioSamples:SAMEA5840405, GEO:GSM861007, GEO:GSM1084842, GEO:GSM1084934, GEO:GSM3192176, GEO:GSM3192177, hPSCreg:WISCi004-B, SKIP:SKIP002368, SKIP:SKIP004449, WiCell:ips-imr90-4, Wikidata:Q54898191

ID: CVCL_C437

Vendor: WiCell

Catalog Number: ips-imr90-4

Record Creation Time: 20250131T201042+0000

Record Last Update: 20250131T202534+0000

Ratings and Alerts

No rating or validation information has been found for IPS(IMR90)-4.

No alerts have been found for IPS(IMR90)-4.

Data and Source Information

Source: Cellosaurus

Usage and Citation Metrics

We found 21 mentions in open access literature.

Listed below are recent publications. The full list is available at FDI Lab - SciCrunch.org.

Al-Dalahmah O, et al. (2024) Osteopontin drives neuroinflammation and cell loss in MAPT-N279K frontotemporal dementia patient neurons. Cell stem cell, 31(5), 676.

Weber CM, et al. (2024) Impacts of APOE-?4 and exercise training on brain microvascular endothelial cell barrier function and metabolism. EBioMedicine, 111, 105487.

Syangtan D, et al. (2024) Heparan sulfate regulates the fate decisions of human pluripotent stem cells. Stem cell reports, 102384.

Pervaiz I, et al. (2023) Ketone bodies supplementation restores the barrier function, induces a metabolic switch, and elicits beta-hydroxybutyrate diffusion across a monolayer of iPSC-derived brain microvascular endothelial cells. Microvascular research, 150, 104585.

Cheng Y, et al. (2022) Intrinsic antiviral immunity of barrier cells revealed by an iPSC-derived blood-brain barrier cellular model. Cell reports, 39(9), 110885.

Raut S, et al. (2022) Abeta peptides disrupt the barrier integrity and glucose metabolism of human induced pluripotent stem cell-derived brain microvascular endothelial cells. Neurotoxicology, 89, 110.

Pervaiz I, et al. (2022) An in vitro model of glucose transporter 1 deficiency syndrome at the blood-brain barrier using induced pluripotent stem cells. Journal of neurochemistry, 162(6), 483.

Nishihara H, et al. (2021) Differentiation of human pluripotent stem cells to brain microvascular endothelial cell-like cells suitable to study immune cell interactions. STAR

protocols, 2(2), 100563.

Giandomenico SL, et al. (2021) Generation and long-term culture of advanced cerebral organoids for studying later stages of neural development. Nature protocols, 16(2), 579.

Al-Ahmad AJ, et al. (2021) Neurolysin substrates bradykinin, neurotensin and substance P enhance brain microvascular permeability in a human in vitro model. Journal of neuroendocrinology, 33(2), e12931.

Gastfriend BD, et al. (2021) Wnt signaling mediates acquisition of blood-brain barrier properties in naïve endothelium derived from human pluripotent stem cells. eLife, 10.

Xu B, et al. (2020) Transplantation of iPS-derived vascular endothelial cells improves white matter ischemic damage. Journal of neurochemistry, 153(6), 759.

Kinarivala N, et al. (2020) An iPSC-Derived Neuron Model of CLN3 Disease Facilitates Small Molecule Phenotypic Screening. ACS pharmacology & translational science, 3(5), 931.

Lu Y, et al. (2020) Single-Cell Analysis of Human Retina Identifies Evolutionarily Conserved and Species-Specific Mechanisms Controlling Development. Developmental cell, 53(4), 473.

Vasconcelos E Sá J, et al. (2020) Unveiling dynamic metabolic signatures in human induced pluripotent and neural stem cells. PLoS computational biology, 16(4), e1007780.

Page S, et al. (2019) Oxygen-Glucose Deprivation/Reoxygenation-Induced Barrier Disruption at the Human Blood-Brain Barrier is Partially Mediated Through the HIF-1 Pathway. Neuromolecular medicine, 21(4), 414.

Martinez A, et al. (2019) Effects of glyphosate and aminomethylphosphonic acid on an isogeneic model of the human blood-brain barrier. Toxicology letters, 304, 39.

Al-Ahmad AJ, et al. (2019) Hyaluronan impairs the barrier integrity of brain microvascular endothelial cells through a CD44-dependent pathway. Journal of cerebral blood flow and metabolism : official journal of the International Society of Cerebral Blood Flow and Metabolism, 39(9), 1759.

Bogacheva MS, et al. (2018) Differences in definitive endoderm induction approaches using growth factors and small molecules. Journal of cellular physiology, 233(4), 3578.

Patel R, et al. (2017) Isogenic blood-brain barrier models based on patient-derived stem cells display inter-individual differences in cell maturation and functionality. Journal of neurochemistry, 142(1), 74.