Resource Summary Report

Generated by RRID on Aug 29, 2026

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

Description: Cell line IPS(IMR90)-4 is a Induced pluripotent stem cell with a species of origin Homo sapiens (Human)

Sex: Female

Defining Citation: PMID:18029452, PMID:21654665, PMID:22905176, PMID:30044992, PMID:32946783, PMID:36261438

Comments: Population: Caucasian., From: University of Wisconsin; Madison; USA.

Category: Induced pluripotent stem cell

Organism: Homo sapiens (Human)

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:GSM658950, 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

Hierarchy: cvcl_0347

Record Creation Time: 20220427T220639+0000

Record Last Update: 20260815T234329+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 32 mentions in open access literature.

Listed below are recent publications. The full list is available at RRID .

Øhlenschlæger MS, et al. (2026) Modeling Synaptic Maturation From Growth Cone to Synapse in Human Organoids. Journal of neurochemistry, 170(5), e70458.

Øhlenschlæger MS, et al. (2026) Multi-omic analysis of guided and unguided forebrain organoids reveals differences in cellular composition and metabolic profiles. Cell reports methods, 6(2), 101295.

Zheng Z, et al. (2026) Targeting PGAM5-driven mitochondrial integrated stress response slows ALS progression across subtypes. Neuron, 114(12), 2109.

Capendale PE, et al. (2026) Microglia cause HIV-induced transcriptional and metabolic changes in human neural organoids. Communications biology, 9(1).

Hartmann C, et al. (2026) Brain capillary endothelial-like cells show altered barrier functionality and reduced transport of amyloid ? in late-onset Alzheimer disease. Fluids and barriers of the CNS, 23(1), 11.

Krieg K, et al. (2026) Protocol for validating drug efficacy and safety in scalable 96-well platforms of human cortical organoids and melanoma brain metastases. STAR protocols, 7(2), 104568.

Mauser HD, et al. (2025) In Vitro Comparison of Two Python-Based Programs for the Automated Analysis of Tight-Junction Phenotype in Brain Endothelium During Bacterial Infection. Cell biochemistry and function, 43(6), e70093.

Krieg K, et al. (2025) Cortical organoid-derived models of the melanoma brain metastatic niche enable prioritization of cancer-targeting drugs. Cell reports methods, 5(12), 101236.

Gomes CM, et al. (2025) Addressing neuroinflammation in human induced pluripotent stem cell-derived central nervous system neurospheroids. iScience, 28(9), 113246.

Mulder LA, et al. (2025) Effect of antivirals on clinical and lab-adapted human cytomegalovirus strains using induced pluripotent stem cell-derived human neural models. Antiviral research, 241, 106233.

Pervaiz I, et al. (2025) Glucose Transporter 1 Deficiency Impairs Glucose Metabolism and Barrier Induction in Human Induced Pluripotent Stem Cell-Derived Astrocytes. Journal of cellular physiology, 240(1), e31523.

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.

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.

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.

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.