

Resource Summary Report

Generated by [RRID](#) on Sep 9, 2026

WA09

RRID:CVCL_9773

Type: Cell Line

Proper Citation

RRID:CVCL_9773

Cell Line Information

URL: https://web.expasy.org/cellosaurus/CVCL_9773

Proper Citation: RRID:CVCL_9773

Description: Cell line WA09 is a Embryonic stem cell with a species of origin Homo sapiens (Human)

Sex: Female

Defining Citation: [PMID:9804556](#), [PMID:14745950](#), [PMID:16388305](#), [PMID:16919167](#), [PMID:17570852](#), [PMID:17572666](#), [PMID:20641038](#), [PMID:20736931](#), [PMID:21295703](#), [PMID:21936705](#), [PMID:21983960](#), [PMID:22514597](#), [PMID:22802639](#), [PMID:23117585](#), [PMID:24259714](#), [PMID:27293150](#), [PMID:27476965](#), [PMID:27688775](#), [PMID:28435121](#), [PMID:28445466](#), [PMID:28664172](#), [PMID:29246576](#), [PMID:29861859](#), [PMID:30388422](#), [PMID:35805069](#)

Comments: Anecdotal: WA01, WA07, WA09, WA13 and WA14 were the first human embryonic stem cells to be established., From: University of Wisconsin; Madison; USA., Part of: NHBLI Progenitor Cell Biology Consortium (PCBC) collection., Part of: ENCODE project common cell types; tier 3; Group: Clinical grade pluripotent cell line.

Category: Embryonic stem cell

Organism: Homo sapiens (Human)

Name: WA09

Synonyms: WA 09, WA-09, WA9, H9, H9.hESCs, H9 ESC, H9 hES, H9ES, GE09, WAc003-A, WICELLE003-A, WAc009-A, WA09-PCBC, PCBC02hse2014030502, SC14-067, UKERe008-A

Cross References: BTO:BTO_0006062, CLO:CLO_0037313, 4DN:4DNSR9WBB58Z, BioGRID_ORCS_Cell_line:1321, BioSample:SAMN03471903,

BioSamples:SAMEA7769668, CCRID:3101HUMSCSP302, CCRID:3101HUMSCSP307, ENCODE:ENCBS013BRF, ENCODE:ENCBS061KRP, ENCODE:ENCBS113LZP, ENCODE:ENCBS140HIH, ENCODE:ENCBS156LDX, ENCODE:ENCBS220TZB, ENCODE:ENCBS277KDR, ENCODE:ENCBS298AAA, ENCODE:ENCBS299AAA, ENCODE:ENCBS300AAA, ENCODE:ENCBS315DEY, ENCODE:ENCBS375GFI, ENCODE:ENCBS377MXB, ENCODE:ENCBS399JWQ, ENCODE:ENCBS410BMR, ENCODE:ENCBS417MAQ, ENCODE:ENCBS477SFO, ENCODE:ENCBS485PGF, ENCODE:ENCBS532LWE, ENCODE:ENCBS616QKE, ENCODE:ENCBS656LSW, ENCODE:ENCBS692FVF, ENCODE:ENCBS703ZDS, ENCODE:ENCBS741LLD, ENCODE:ENCBS757OPX, ENCODE:ENCBS769EPD, ENCODE:ENCBS808UWK, ENCODE:ENCBS853WXF, ENCODE:ENCBS883RFB, ENCODE:ENCBS996IWU, GEO:GSM239975, GEO:GSM288333, GEO:GSM288335, GEO:GSM288397, GEO:GSM347923, GEO:GSM383878, GEO:GSM383879, GEO:GSM384100, GEO:GSM500936, GEO:GSM569191, GEO:GSM569192, GEO:GSM579901, GEO:GSM579902, GEO:GSM603054, GEO:GSM603055, GEO:GSM605307, GEO:GSM605310, GEO:GSM605314, GEO:GSM605316, GEO:GSM605324, GEO:GSM616127, GEO:GSM616128, GEO:GSM616129, GEO:GSM627785, GEO:GSM637777, GEO:GSM665037, GEO:GSM667608, GEO:GSM667609, GEO:GSM667610, GEO:GSM667611, GEO:GSM667612, GEO:GSM667613, GEO:GSM667616, GEO:GSM667619, GEO:GSM667620, GEO:GSM667621, GEO:GSM667622, GEO:GSM667623, GEO:GSM667625, GEO:GSM667626, GEO:GSM667628, GEO:GSM667629, GEO:GSM667630, GEO:GSM667631, GEO:GSM667632, GEO:GSM667633, GEO:GSM667634, GEO:GSM667635, GEO:GSM667636, GEO:GSM667637, GEO:GSM667638, GEO:GSM667639, GEO:GSM667640, GEO:GSM667643, GEO:GSM669899, GEO:GSM669901, GEO:GSM670053, GEO:GSM674603, GEO:GSM706044, GEO:GSM706059, GEO:GSM706060, GEO:GSM706061, GEO:GSM706062, GEO:GSM706063, GEO:GSM706064, GEO:GSM706066, GEO:GSM706071, GEO:GSM706076, GEO:GSM755488, GEO:GSM755491, GEO:GSM816629, GEO:GSM856731, GEO:GSM860961, GEO:GSM860962, GEO:GSM860963, GEO:GSM862733, GEO:GSM927236, GEO:GSM997555, GEO:GSM997556, GEO:GSM997557, GEO:GSM1040243, GEO:GSM1040313, GEO:GSM1084832, GEO:GSM1084835, GEO:GSM1084943, GEO:GSM1084944, GEO:GSM1084992, GEO:GSM1085015, GEO:GSM1215278, GEO:GSM1215279, GEO:GSM1227088, GEO:GSM1489249, GEO:GSM1489460, GEO:GSM1589800, GEO:GSM1589812, GEO:GSM1589932, GEO:GSM1589944, GEO:GSM1658377, hPSCreg:WAE009-A, IGRhCellID:H9%20p25-2, IGRhCellID:H9%20p34, LINCSeq:ES-1001, NIHhESC:NIHhESC-10-0062, PRIDE:PXD003903, PRIDE:PXD006271, SKIP:SKIP001452, SKIP:SKIP001935, TOKU-E:4223, WiCell:wa09, WiCell:wa09-cgmp-material, WiCell:wa09-matched-research, WiCell:wa09-pcbc, Wikidata:Q27555433

ID: CVCL_9773

Record Creation Time: 20220427T221712+0000

Record Last Update: 20260905T182730+0000

Ratings and Alerts

No rating or validation information has been found for WA09.

No alerts have been found for WA09.

Data and Source Information

Source: [CelloSaurus](#)

Usage and Citation Metrics

We found 194 mentions in open access literature.

Listed below are recent publications. The full list is available at [RRID](#) .

Collot R, et al. (2026) IGSF11-VISTA is a critical and targetable immune checkpoint axis in diffuse midline glioma. *Cancer cell*, 44(3), 641.

O'Hern C, et al. (2026) Protocol to generate immunocompetent human heart-macrophage assembloids for the study of immune-cardiac interactions. *STAR protocols*, 7(1), 104411.

Liu Y, et al. (2026) 3D bioprinted multifunctional GelMA/TMP scaffold integrated with neural stem cell-derived extracellular vesicles and neural progenitor cells for spinal cord injury repair. *Journal of tissue engineering*, 17, 20417314261425659.

Quan H, et al. (2026) Generating Microglia-Integrated Cortical Organoids from Human Embryonic Stem Cells. *Stem cell reviews and reports*, 22(5), 2568.

Zanella E, et al. (2026) Damage-induced i-loops generate eccDNA from repetitive elements. *Molecular cell*, 86(10), 1856.

Ahuja K, et al. (2026) Human Myelin Spheres for in Vitro Oligodendrocyte Maturation, Myelination and Neurological Disease Modeling. *Stem cell reviews and reports*, 22(3), 1420.

Fort L, et al. (2026) Actomyosin contractility is a potent suppressor of mesoderm induction by human pluripotent stem cells. *The Journal of cell biology*, 225(5).

Du R, et al. (2026) TTNPB Promotes Human Pluripotent Stem Cell-to-Neural Stem Cell Transition via Modulation of Chromatin Accessibility and the S-(5'-adenosyl)-L-homocysteine/Choline Metabolic Network. *Advanced science (Weinheim, Baden-Wurttemberg, Germany)*, 13(22), e15648.

Liang PY, et al. (2026) Cardiovascular Organoids With Adjustable Endothelial Composition via SOX17-Engineered hPSCs. *Biotechnology and bioengineering*.

Zou X, et al. (2026) Self-assembled chamber-like cardiac organoids for modeling cardiac chamber formation and cardiotoxicity assessment. *Nature communications*, 17(1).

Jovanovic VM, et al. (2026) Scalable hypothalamic neuron differentiation from human pluripotent stem cells suitable for modeling metabolic disorders. *Stem cell reports*, 21(7), 102958.

Liu Y, et al. (2026) Human PSC-derived organoids model sympathetic ganglion development and its functional crosstalk with the heart. *Cell stem cell*, 33(1), 29.

Tekguc M, et al. (2026) Engineering scalable vascularized kidney organoids for in vivo glomerular filtration with human endothelial integration. *npj biomedical innovations*, 3(1), 10.

Huang Z, et al. (2026) Comprehensive Profiling of N6-methyladenosine (m6A) Readouts Reveals Novel m6A Readers That Regulate Human Embryonic Stem Cell Differentiation. *Advanced science* (Weinheim, Baden-Wurttemberg, Germany), 13(18), e10075.

Nocente MC, et al. (2026) Poising and connectivity of emergent human developmental enhancers in the transition from naive to primed pluripotency. *Cell reports*, 45(6), 117402.

Vaquié AM, et al. (2026) Adaptaquin is selectively toxic to glioma stem cells through disruption of iron and cholesterol metabolism. *Molecular oncology*, 20(2), 307.

Park SY, et al. (2026) Multimodal electroconductive PLGA-based scaffold orchestrates neuroprotection and regeneration following severe spinal cord injury. *Journal of nanobiotechnology*, 24(1), 25.

Wei M, et al. (2026) Mitochondrial Fission Regulator 1-Like Protein Protects the Heart from Ischemia/Reperfusion Injury via Dual Mitochondrial Mechanisms. *Research* (Washington, D.C.), 9, 1241.

Tian Y, et al. (2026) Unraveling the Morphological and Functional Maturation Mechanisms Underlying Human Neural Development Using iPSCs-Derived Neuronal Model. *Advanced science* (Weinheim, Baden-Wurttemberg, Germany), 13(18), e12891.

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