

# Resource Summary Report

Generated by [dkNET](#) on Sep 3, 2026

## HMC3

RRID:CVCL\_I176

Type: Cell Line

### Proper Citation

ATCC Cat# CRL-3304, RRID:CVCL\_I176

### Cell Line Information

**URL:** [https://web.expasy.org/cellosaurus/CVCL\\_I176](https://web.expasy.org/cellosaurus/CVCL_I176)

**Proper Citation:** ATCC Cat# CRL-3304, RRID:CVCL\_I176

**Description:** Cell line HMC3 is a Transformed cell line with a species of origin Homo sapiens (Human)

**Sex:** Sex unspecified

**Defining Citation:** [PMID:7478261](#), [PMID:16371321](#), [PMID:20375612](#), [PMID:30200996](#), [PMID:35352315](#)

**Comments:** Virology: Susceptible to infection by Chikungunya virus. Supports viral replication with no significant loss in cell viability until 72 hours post infection (PubMed=35352315).

**Category:** Transformed cell line

**Organism:** Homo sapiens (Human)

**Name:** HMC3

**Synonyms:** Human Microglia Clone 3, CHME-3, CHME3

**Cross References:** ATCC:CRL-3304, CLS:300102, Ubigene:YC-C131, Wikidata:Q54889911

**ID:** CVCL\_I176

**Vendor:** ATCC

**Catalog Number:** CRL-3304

**Record Creation Time:** 20220427T220436+0000

## Ratings and Alerts

No rating or validation information has been found for HMC3.

No alerts have been found for HMC3.

---

## Data and Source Information

**Source:** [Cellosaurus](#)

---

## Usage and Citation Metrics

We found 235 mentions in open access literature.

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

Khan F, et al. (2026) Microglial TBK1 Signaling Promotes Breast Cancer Brain Metastasis. Cancer research, 86(1), 12.

Sajan MP, et al. (2026) Progranulin deficiency in the brain activates an insulin signaling pathway that may promote neurodegeneration. iScience, 29(5), 115720.

Denaro S, et al. (2026) PARP1 rewires neuroinflammatory and redox metabolism associated with reactive neuroglia in neuropathic pain. Redox biology, 95, 104268.

Sun X, et al. (2026) Discovery of a novel Nrf2 activator that modulates mitochondrial function in neurons by regulating DHRS3-Nrf2 interaction after ischemic stroke. Theranostics, 16(10), 5713.

Liao CH, et al. (2026) Carnosic Acid Protects against Bisphenol A-Induced NLRP3 Inflammasome Activation by Attenuating Oxidative Stress in Human Microglial Cells. Inflammation, 49(1).

Zhang J, et al. (2026) Microglia-derived exosomal miR-31-5p promotes type 2 diabetic retinopathy by impairing physiological angiogenesis homeostasis. Free radical biology & medicine, 254, 527.

Chen Y, et al. (2026) Cholesterol Promotes Lung Adenocarcinoma Brain Metastasis by Stabilizing EGFR Protein to Drive EMT, Metabolic Reprogramming, and Premetastatic Niche Formation. Advanced science (Weinheim, Baden-Wurttemberg, Germany), 13(17), e73843.

Pilat DJ, et al. (2026) The gain-of-function TREM2-T96K mutation increases risk for Alzheimer's disease by impairing microglial function. Neuron, 114(1), 46.

Zheng Y, et al. (2026) The pyroptosis cascade between inflammatory endothelial cells and microglia facilitates BBB disruption in bacterial meningitis. Cell reports, 45(7), 117634.

Hartig T, et al. (2026) 3D Aerohydrogel Scaffolds for Brain Tissue Engineering and In Vitro Neuroscience. *Chem & bio engineering*, 3(4), 487.

Ren C, et al. (2026) Mesenchymal stem cell-derived small extracellular vesicles enhance the therapeutic effect of retinal progenitor cells in retinal degenerative disease rats. *Neural regeneration research*, 21(2), 821.

Marzani E, et al. (2026) Pharmacological inhibition of CDK9 counteracts neuroinflammatory impairments in sepsis-associated encephalopathy. *Biomedicine & pharmacotherapy = Biomedecine & pharmacotherapie*, 198, 119274.

Nguyen HD, et al. (2025) Pathological role of immunoproteasome PSMB8 in Parkinson's disease: a link between  $\alpha$ -synuclein aggregation and immune activation. *EBioMedicine*, 121, 105990.

Isik S, et al. (2025) Development of a Hydrogel Platform with GBM and Microglia: A Potential Glioblastoma Tumor Model. *ACS applied bio materials*, 8(9), 7757.

Kundu S, et al. (2025) Inhibition of Extracellular Matrix Protein Fibulin-3 Reduces Immunosuppressive Signaling and Increases Macrophage Activation in Glioblastoma. *Cancer research communications*, 5(9), 1599.

Chen J, et al. (2025) Mutual regulation of microglia and astrocytes after Gas6 inhibits spinal cord injury. *Neural regeneration research*, 20(2), 557.

Bose R, et al. (2025) Bi-allelic NRXN1 $\Delta$  deletion in microglia derived from iPSC of an autistic patient increases interleukin-6 production and impairs supporting function on neuronal networking. *Brain, behavior, and immunity*, 123, 28.

Lunghi G, et al. (2025) GM1 Oligosaccharide Modulates Microglial Activation and  $\alpha$ -Synuclein Clearance in a Human In Vitro Model. *International journal of molecular sciences*, 26(15).

Koury J, et al. (2025) EphB2-mediated ephrin-B reverse signaling on microglia drives an anti-viral, but inflammatory and neurotoxic response associated with HIV. *Journal of neuroinflammation*, 22(1), 171.

Reyes EY, et al. (2025) Cryptococcus exploits delayed microglial activation, and microglial osteopontin/Spp1 impairs peripheral host control. *Cell host & microbe*, 33(12), 2067.