

Resource Summary Report

Generated by [NIF](#) on Sep 8, 2026

NSC-34

RRID:CVCL_D356

Type: Cell Line

Proper Citation

RRID:CVCL_D356

Cell Line Information

URL: https://web.expasy.org/cellosaurus/CVCL_D356

Proper Citation: RRID:CVCL_D356

Description: Cell line NSC-34 is a Hybrid cell line with a species of origin Mus musculus (Mouse)

Defining Citation: [PMID:1467557](#), [PMID:17896795](#), [PMID:25193168](#), [PMID:27242431](#), [PMID:28837265](#)

Comments: Miscellaneous: STR profile from personal communication of Rodriguez-Tarduchy Segovia, Gemma., Characteristics: Produced by the fusion of motor neuron enriched, embryonic 12-14 days mouse spinal cord cells with N18TG2 (PubMed=1467557).

Category: Hybrid cell line

Organism: Mus musculus (Mouse)

Name: NSC-34

Synonyms: NSC 34, NSC34, Neuroblastoma x Spinal Cord-34

Cross References: BTO:BTO_0004488, Lonza:5, PRIDE:PXD000666, PRIDE:PXD004913, PRIDE:PXD007178, Wikidata:Q54931057

ID: CVCL_D356

Hierarchy: cvcl_2132

Record Creation Time: 20220427T221348+0000

Record Last Update: 20260905T181933+0000

Ratings and Alerts

No rating or validation information has been found for NSC-34.

No alerts have been found for NSC-34.

Data and Source Information

Source: [CelloSaurus](#)

Usage and Citation Metrics

We found 415 mentions in open access literature.

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

Vitale G, et al. (2026) Empowering the NSC-34 cell line as a motor neuron model: Cytosine arabinoside's action. *Neural regeneration research*, 21(1), 357.

Kuroiwa N, et al. (2026) Rational Design of a Multivalent RNA Combining Structural Motifs Tailored to Multiple Domains of Fused in Sarcoma for Potent Inhibition of Aggregation. *Chembiochem : a European journal of chemical biology*, 27(8), e202500568.

Li S, et al. (2025) Exosomes originating from neural stem cells undergoing necroptosis participate in cellular communication by inducing TSC2 upregulation of recipient cells following spinal cord injury. *Neural regeneration research*, 20(11), 3273.

DeAngelo JD, et al. (2025) Productive mRNA chromatin escape is promoted by PRMT5 activity. *Molecular cell*, 85(21), 4016.

Lum JS, et al. (2025) A polytherapy approach demonstrates therapeutic efficacy for the treatment of SOD1 associated amyotrophic lateral sclerosis. *EBioMedicine*, 115, 105692.

Romano R, et al. (2025) The Type III Intermediate Filament Protein Peripherin Regulates Lysosomal Degradation Activity and Autophagy. *International journal of molecular sciences*, 26(2).

Li Y, et al. (2025) Myeloid Irf5 Deficiency Enhances the Therapeutic Efficacy of IMD-0354 in a TDP-25-Induced Neurodegeneration Model. *Molecular neurobiology*, 63(1), 290.

Choi ES, et al. (2024) Unveiling the double-edged sword: SOD1 trimers possess tissue-selective toxicity and bind septin-7 in motor neuron-like cells. *Structure (London, England : 1993)*, 32(10), 1776.

Fan YP, et al. (2024) UBC9-mediated SUMOylation of Lamin B1 enhances DNA-damage-induced nuclear DNA leakage and autophagy after spinal cord injury. *Journal of cellular physiology*.

Kim A, et al. (2024) Cdk5 inhibition in the SOD1G93A transgenic mouse model of amyotrophic lateral sclerosis suppresses neurodegeneration and extends survival. *Journal of neurochemistry*, 168(9), 2908.

Mahadev Bhat S, et al. (2024) Heterogeneous distribution of mitochondria and succinate dehydrogenase activity in human airway smooth muscle cells. *FASEB bioAdvances*, 6(6), 159.

Chen W, et al. (2024) OSMR is a potential driver of inflammation in amyotrophic lateral sclerosis. *Neural regeneration research*, 19(11), 2513.

Cascella R, et al. (2023) An in situ and in vitro investigation of cytoplasmic TDP-43 inclusions reveals the absence of a clear amyloid signature. *Annals of medicine*, 55(1), 72.

Shin SM, et al. (2023) Peripheral sensory neurons and non-neuronal cells express functional Piezo1 channels. *Molecular pain*, 19, 17448069231174315.

Wang SM, et al. (2023) Nucleoporin POM121 signals TFEB-mediated autophagy via activation of SIGMAR1/sigma-1 receptor chaperone by pridopidine. *Autophagy*, 19(1), 126.

So HK, et al. (2023) Protein Arginine Methyltransferase 1 Ablation in Motor Neurons Causes Mitochondrial Dysfunction Leading to Age-related Motor Neuron Degeneration with Muscle Loss. *Research (Washington, D.C.)*, 6, 0158.

Miyagi T, et al. (2023) Differential toxicity and localization of arginine-rich C9ORF72 dipeptide repeat proteins depend on de-clustering of positive charges. *iScience*, 26(6), 106957.

Sleigh JN, et al. (2023) Boosting peripheral BDNF rescues impaired in vivo axonal transport in CMT2D mice. *JCI insight*, 8(9).

Jin X, et al. (2023) miR-506-3p Relieves Neuropathic Pain following Brachial Plexus Avulsion via Mitigating Microglial Activation through Targeting the CCL2-CCR2 Axis. *Developmental neuroscience*, 45(1), 37.

Ackerman HD, et al. (2023) Bile Acids Induce Neurite Outgrowth in Nsc-34 Cells via TGR5 and a Distinct Transcriptional Profile. *Pharmaceuticals (Basel, Switzerland)*, 16(2).