Resource Summary Report

Generated by RRID on Sep 2, 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: 20260829T235444+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 RRID .

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).