

Resource Summary Report

Generated by [NIF](#) on Aug 19, 2026

Ears2^{tm1a}(EUCOMM)Wtsi

RRID:IMSR_EUMMCR:477

Type: Organism

Proper Citation

RRID:IMSR_EUMMCR:477

Organism Information

URL:

Proper Citation: RRID:IMSR_EUMMCR:477

Description: Mus musculus with name Ears2^{tm1a}(EUCOMM)Wtsi from IMSR.

Species: Mus musculus

Notes: gene symbol note: glutamyl-tRNA synthetase 2; mitochondrial; mutant strain: Ears2

Affected Gene: glutamyl-tRNA synthetase 2; mitochondrial

Genomic Alteration: targeted mutation 1a; Wellcome Trust Sanger Institute

Catalog Number: EUMMCR:477

Database: European Mouse Mutant Cell Repository

Database Abbreviation: EuMMCR

Availability: ES Cell

Organism Name: Ears2^{tm1a}(EUCOMM)Wtsi

Record Creation Time: 20250513T061804+0000

Record Last Update: 20260815T055201+0000

Ratings and Alerts

No rating or validation information has been found for Ears2^{tm1a}(EUCOMM)Wtsi.

No alerts have been found for Ears2^{tm1a}(EUCOMM)Wtsi.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: European Mouse Mutant Cell Repository

Usage and Citation Metrics

We found 38 mentions in open access literature.

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

Budluang P, et al. (2025) N-benzyl-N-methyldecane-1-amine derived from garlic ameliorates UVB-induced photoaging in HaCaT cells and SKH-1 hairless mice. *Scientific reports*, 15(1), 6979.

Lee HR, et al. (2024) Potential Role of Dietary Salmon Nasal Cartilage Proteoglycan on UVB-Induced Photoaged Skin. *Biomolecules & therapeutics*, 32(2), 249.

Geng R, et al. (2024) Dietary Isoeugenol Supplementation Attenuates Chronic UVB-Induced Skin Photoaging and Modulates Gut Microbiota in Mice. *Nutrients*, 16(4).

Levra Levron C, et al. (2023) Tissue memory relies on stem cell priming in distal undamaged areas. *Nature cell biology*, 25(5), 740.

Kim SH, et al. (2023) Protective effects of an electrophilic metabolite of docosahexaenoic acid on UVB-induced oxidative cell death, dermatitis, and carcinogenesis. *Redox biology*, 62, 102666.

Yang Z, et al. (2022) The effect of Q-switched 1064-nm dymium-doped yttrium aluminum garnet laser on the skin barrier and collagen synthesis through miR-24-3p. *Lasers in medical science*, 37(1), 205.

Chen YY, et al. (2022) Skin damage induced by zinc oxide nanoparticles combined with UVB is mediated by activating cell pyroptosis via the NLRP3 inflammasome-autophagy-exosomal pathway. *Particle and fibre toxicology*, 19(1), 2.

Park NJ, et al. (2022) Lobelia chinensis Extract and Its Active Compound, Diosmetin, Improve Atopic Dermatitis by Reinforcing Skin Barrier Function through SPINK5/LEKTI Regulation. *International journal of molecular sciences*, 23(15).

Zheng Y, et al. (2022) Commensal Staphylococcus epidermidis contributes to skin barrier homeostasis by generating protective ceramides. *Cell host & microbe*, 30(3), 301.

Kang MK, et al. (2021) Dietary Collagen Hydrolysates Ameliorate Furrowed and Parched Skin Caused by Photoaging in Hairless Mice. *International journal of molecular sciences*, 22(11).

Gilardoni M, et al. (2021) Evidence for the systemic diffusion of (2-chloroethyl)-ethyl-sulfide, a sulfur mustard analog, and its deleterious effects in brain. *Toxicology*, 462, 152950.

Jegal J, et al. (2021) Wikstroemiaganpi Extract Improved Atopic Dermatitis-Like Skin Lesions via Suppression of Interleukin-4 in 2,4-Dinitrochlorobenzene-Induced SKH-1 Hairless Mice. *Molecules* (Basel, Switzerland), 26(7).

Pérez M, et al. (2021) Comparison of Antibacterial Activity and Wound Healing in a Superficial Abrasion Mouse Model of *Staphylococcus aureus* Skin Infection Using Photodynamic Therapy Based on Methylene Blue or Mupirocin or Both. *Frontiers in medicine*, 8, 673408.

Kim MJ, et al. (2020) Reduced Fecal Calprotectin and Inflammation in a Murine Model of Atopic Dermatitis Following Probiotic Treatment. *International journal of molecular sciences*, 21(11).

Petrova J, et al. (2020) Thrombin-derived C-terminal fragments aggregate and scavenge bacteria and their proinflammatory products. *The Journal of biological chemistry*, 295(11), 3417.

Kong YH, et al. (2020) Juglanin administration protects skin against UVB-induced injury by reducing Nrf2-dependent ROS generation. *International journal of molecular medicine*, 46(1), 67.

Bode AM, et al. (2020) Are FDA-Approved Sunscreen Components Effective in Preventing Solar UV-Induced Skin Cancer? *Cells*, 9(7).

Hosseini M, et al. (2019) UVB-induced DHODH upregulation, which is driven by STAT3, is a promising target for chemoprevention and combination therapy of photocarcinogenesis. *Oncogenesis*, 8(10), 52.

Kalin JH, et al. (2019) Investigation into the use of histone deacetylase inhibitor MS-275 as a topical agent for the prevention and treatment of cutaneous squamous cell carcinoma in an SKH-1 hairless mouse model. *PloS one*, 14(3), e0213095.

Nie S, et al. (2019) NLRP3 Inflammasome Mediated Interleukin-1 β Production in Cancer-Associated Fibroblast Contributes to ALA-PDT for Cutaneous Squamous Cell Carcinoma. *Cancer management and research*, 11, 10257.