

Resource Summary Report

Generated by T1D on Sep 20, 2026

B6N.FVB-Tg(Dmp1-cre)1Jqfe/BwdJ

RRID:IMSR_JAX:023047

Type: Organism

Proper Citation

RRID:IMSR_JAX:023047

Organism Information

URL: <https://www.jax.org/strain/023047>

Proper Citation: RRID:IMSR_JAX:023047

Description: Mus musculus with name B6N.FVB-Tg(Dmp1-cre)1Jqfe/BwdJ from IMSR.

Species: Mus musculus

Synonyms: B6N.Cg-Tg(Dmp1-cre)1Jqfe/BwdJ

Notes: gene symbol note: |dentin matrix protein 1|transgene insertion 1; Jian Q Feng;
mutant strain|congenic strain: |Dmp1|Tg(Dmp1-cre)1Jqfe

Affected Gene: |dentin matrix protein 1|transgene insertion 1; Jian Q Feng

Genomic Alteration: transgene insertion 1; Jian Q Feng

Catalog Number: JAX:023047

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: sperm

Organism Name: B6N.FVB-Tg(Dmp1-cre)1Jqfe/BwdJ

Record Creation Time: 20250513T053747+0000

Record Last Update: 20260919T054933+0000

Ratings and Alerts

No rating or validation information has been found for B6N.FVB-Tg(Dmp1-cre)1Jqfe/BwdJ.

No alerts have been found for B6N.FVB-Tg(Dmp1-cre)1Jqfe/BwdJ.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 41 mentions in open access literature.

Listed below are recent publications. The full list is available at [T1D](#).

Mora-Antoinette M, et al. (2025) Osteocyte Nicotinic Acetylcholine Receptors Impact Bone Mechanoadaptation in a Sexually Dimorphic Manner: Osteocyte Cholinergic Signaling in Mechanoadaptation. bioRxiv : the preprint server for biology.

Horenberg AL, et al. (2025) A novel workflow for 3D imaging and spatial analysis of nerves in bone. Bone reports, 27, 101881.

Lan Q, et al. (2025) ATG7-driven mitophagy in BMSC@CS hydrogel reprograms metabolism to boost bone regeneration. Materials today. Bio, 35, 102483.

Mora-Antoinette M, et al. (2025) Cholinergic regulation of osteocyte mechanobiology: A paradigm for bone adaptation. Science advances, 11(34), eads9720.

Zhang F, et al. (2025) The ESCRT protein CHMP5 restricts bone formation by controlling endolysosome-mitochondrion-mediated cell senescence. eLife, 13.

Dole NS, et al. (2024) High-fat and high-carbohydrate diets increase bone fragility through TGF- β -dependent control of osteocyte function. JCI insight, 9(16).

Shao X, et al. (2024) Rescuing SERCA2 pump deficiency improves bone mechano-responsiveness in type 2 diabetes by shaping osteocyte calcium dynamics. Nature communications, 15(1), 890.

Aobulikasimu A, et al. (2023) SIRT6-PAI-1 axis is a promising therapeutic target in aging-related bone metabolic disruption. Scientific reports, 13(1), 7991.

Münz S, et al. (2023) Oncostatin M is a regulator of fibroblast growth factor 23 (FGF23) in UMR106 osteoblast-like cells. Scientific reports, 13(1), 8420.

Noonan ML, et al. (2023) Osteocyte Egln1/Phd2 links oxygen sensing and biomineralization via FGF23. Bone research, 11(1), 7.

Laster DJ, et al. (2023) CRISPR interference provides increased cell type-specificity compared to the Cre-loxP system. iScience, 26(8), 107428.

Kimura M, et al. (2022) The concurrent stimulation of Wnt and FGF8 signaling induce differentiation of dental mesenchymal cells into odontoblast-like cells. Medical molecular

morphology, 55(1), 8.

Qin L, et al. (2022) Osteocyte α 1 integrin loss causes low bone mass and impairs bone mechanotransduction in mice. *Journal of orthopaedic translation*, 34, 60.

Yoshimoto T, et al. (2022) Osteocytes directly regulate osteolysis via MYD88 signaling in bacterial bone infection. *Nature communications*, 13(1), 6648.

Xia Y, et al. (2022) Histone H3K27 demethylase, Utx, regulates osteoblast-to-osteocyte differentiation. *Biochemical and biophysical research communications*, 590, 132.

Li Y, et al. (2022) IFT20 governs mesenchymal stem cell fate through positively regulating TGF- β -Smad2/3-Glut1 signaling mediated glucose metabolism. *Redox biology*, 54, 102373.

Canalis E, et al. (2022) Induction of a NOTCH3 Lehman syndrome mutation in osteocytes causes osteopenia in male C57BL/6J mice. *Bone*, 162, 116476.

Dou C, et al. (2022) Sialylation of TLR2 initiates osteoclast fusion. *Bone research*, 10(1), 24.

Wang JS, et al. (2021) Control of osteocyte dendrite formation by Sp7 and its target gene osteocrin. *Nature communications*, 12(1), 6271.

Jing J, et al. (2021) Reciprocal interaction between mesenchymal stem cells and transit amplifying cells regulates tissue homeostasis. *eLife*, 10.