

Magnesium implantation or supplementation ameliorates bone disorder in CFTR-mutant mice through an ATF4-dependent Wnt/ β -catenin signaling

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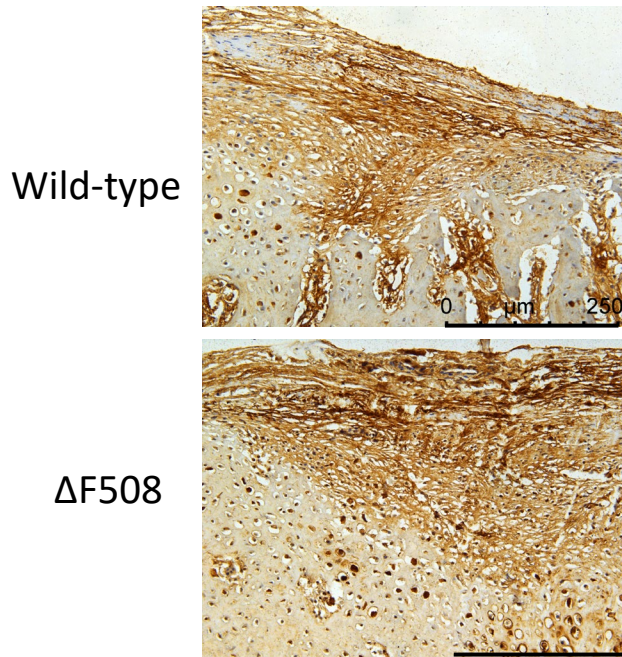
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Supplementary Information

Supplementary Table. Primer sequences

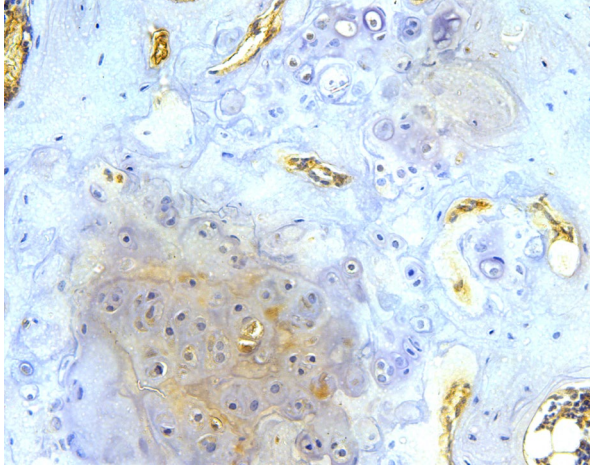
Gene name	Forward (5' - 3')	Reverse (5' - 3')
<i>Cldn16</i>	GAGACCAATAGCAACAGAGG	GTGGAGAATATGGCCAAGAA
<i>Cnnm1</i>	GGCCAGTAAGTGATGATGAG	GCAGAGGGTGGAGTTAATAC
<i>Cnnm2</i>	GGAGATAGGCACGGTCTATAA	CCGGTTATCATGAAGCAGTC
<i>Cnnm3</i>	GAGCCCTTGTACCCTTTATC	GTCCAGCGGGTTAGTATTC
<i>Cnnm4</i>	TCGGAGATTATGGAGAGTGG	GGTTGTAGAAGCGAGTGATG
<i>Magt1</i>	GCCTTCAGCTCACATTCAT	GTGCCTGCTACCATTCTTT
<i>Nipa2</i>	GTGTGAAGGGTTTGGGTATC	AGAGCCCGGTTTAGGTAAT
<i>Slc1a1</i>	CTACACTTCTGTCCTCATCCT	CGGTTACCTTCCTGCTATCT
<i>Slc41a1</i>	TGCTTCAACTCCTCGTAATC	GGGTCACTACCACTCATTTC
<i>Slc41a2</i>	GGCTGTTCCCTACCCATTTAG	AGACTACAGTCAGAGAGGTG
<i>Trpm6</i>	CACCAATACCCTGGAAGAAC	AACACCATCCCTCTTGATTG
<i>Trpm7</i>	CGGATTGGTTACGAGATAGAC	GTACAGGAACGAAGGGAATAC
<i>Trpv2</i>	CTGGCTGAACCTGCTTTAT	CTTACTAGGGCTACAGCAAAG
<i>Trpv4</i>	TGAGATGCTGGCTGTAGA	CCTCCAGTGGCTGATAGTA

Supplementary Fig 1



Supplementary Figure 1. Immuno-staining for CGRP in bone tissues from wild-type and age-matched Δ F508 mice. Scale bars, 250 μ m.

Supplementary Fig 2



Supplementary Figure 2. Involvement of Wnt signaling in magnesium's effect on $\Delta F508$ mice. Immunohistochemical staining for active β -catenin in trabecular bones from wild-type mice at 2 weeks post Mg implantation. Active β -catenin was expressed in both osteoblasts and osteocytes. Scale bar, 100 μ m.