

ECM mediates BMP-2 in a model of temporomandibular joint-osteoarthritis

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Supplementary Material:

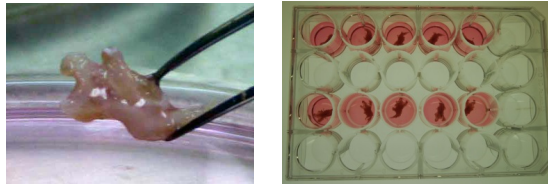
Table S1. Primer sequences used for Real-Time PCR

S1. Diagram showing an outline of experimental approach used to treat and analyze the TMJ from WT *Bgn*^{-/-}*Fmod*^{-/-} mice.

S2. Low power view of condyle showing fibrocartilage, cartilage and subchondral bone layers. The Safranin O red stained area was used to quantify the relative area of cartilage present in treated and untreated WT and *Bgn*^{-/-}*Fmod*^{-/-} condyles.

Table 1 Primer sequences used for real-time PCR

<i>Acan</i>	forward 5' CCCGGTACCCTACAGAGACA3', reverse 5' ACAGTGACCCTGGAAGTTGG3',
<i>Col2A1</i>	forward 5' CGAGGGCAACAGCAGGTTACATAC3' reverse 5' GTCAATAATGGGAAGGCGGGAGGTC3'
<i>Col10A1</i>	forward 5' GGGATGCCGCTTGTCAGTGCTAAC3' reverse 5' TGGGTCGTAATGCTGCTGCCTATTG3'
<i>Sox9</i>	forward 5' TCAGATGCAGTGAGGAGCAC3' reverse 5' CCAGCCACAGCAGTGAGTAA3'
<i>IHH</i>	forward 5' ACGTGCATTGCTCTGTCAAG3' reverse 3' CTCGATGACCTGGAAAGCTC3'
<i>Col1A1</i>	forward 5' CACCCTCAAGAGCCTGAGTC3' reverse 5' GCTTCTTTTCCTTGGGGTTC3'
<i>Runx2</i>	forward 5' GCAGTTCCCAAGCATTTCAT3' reverse 5' CACTCTGGCTTTGGGAAGAG3'
<i>osx (SP7)</i>	forward 5' AAGTGTGTGTGCCGTGGATA3' reverse 5' GTCGAGAGGACTGGGGTACA3'
<i>Wisp1</i>	forward 5' ATCGCCCGAGGTACGCAATAGG3' reverse 5' CAGCCCACCGTGCCATCAATG3'
<i>Acp5 (Trap)</i>	forward 5' CAGCAGCCAAGGAGGACTAC3' reverse 5' ACATAGCCCACACCGTTCTC3'
<i>Rankl</i>	forward 5' ATCGTGGTGTATGTCAGCCA3' reverse 5' GTCATTCTGCACATTGTCCG3'
<i>Adamts4</i>	forward 5' CGCTGACCGCCAATGCCAACTG3' reverse 5' CGCTGACCGCCAATGCCAACTG3'
<i>S29</i>	forward 5' GGAGTCACCCACGGAAGTTCCGG3' reverse 5' GGAAGCACTGGCGGCACATG3'



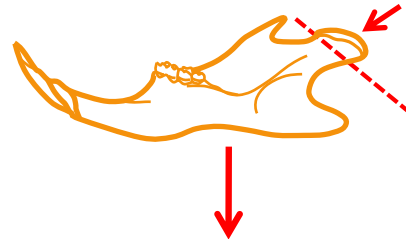
isolate whole mandible condyles from WT or *Bgn^{-/-}Fmod^{-/-}* mice



3 (histology) or 5 weeks (mRNA)

culture explants 24 -well plate for 24h

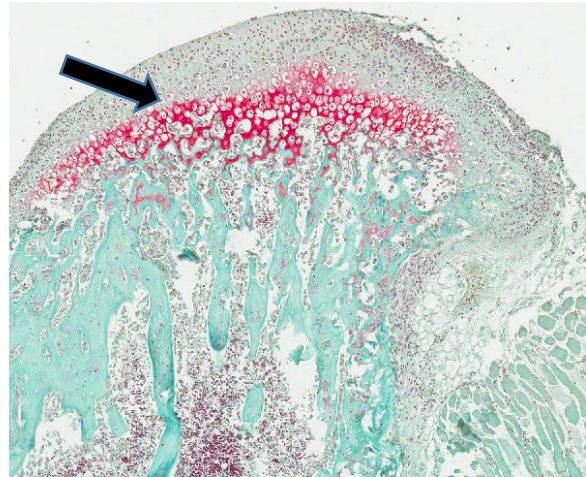
+/- BMP-2 48 hours



collect explants
microCT, histology and mRNA analysis

S1 Experimental Design

Fibrocartilage
Cartilage
Subchondral Bone



**S2. Safranin-O positive region (red stain) of the condyle under low power
Showed the region of the condyle that was measured (arrow).**