Introduction

It is well established that osteoblasts, the cells that form bone, are a predominant source of a blood vessel attracting factor called Vascular Endothelial Growth Factor (VEGF). Recent studies by Dr

Mouse calvaria from WT, HET and KO were pulverised on dry ice, using centrifugation to separate cell lysates, and RNA was extracted through Qiagen RNeasy kits method. cDNA was then synthesised through Qiagen reverse transcriptase kit. Standards for absolute quantification were serially diluted from purified PCR products using primers for CGRP, Sema3A and beta-actin as a housekeeping gene. Brain cDNA was used as a positive control and pure water as a blank. SYBR Green qRT-PCR was run on Bio-Rad Cfx 2.

Results

At the tibia-fibula junction, KO mice have many smaller blood vessels located distally from the tibia cavity rather than fewer larger vessels as shown in the wildtype mice (**Figure 1**). This demonstrates a distinct phenotype caused by the lack of OB-VEGF. Despite this, immunostaining for both nerve markers (TH and CGRP) showed no

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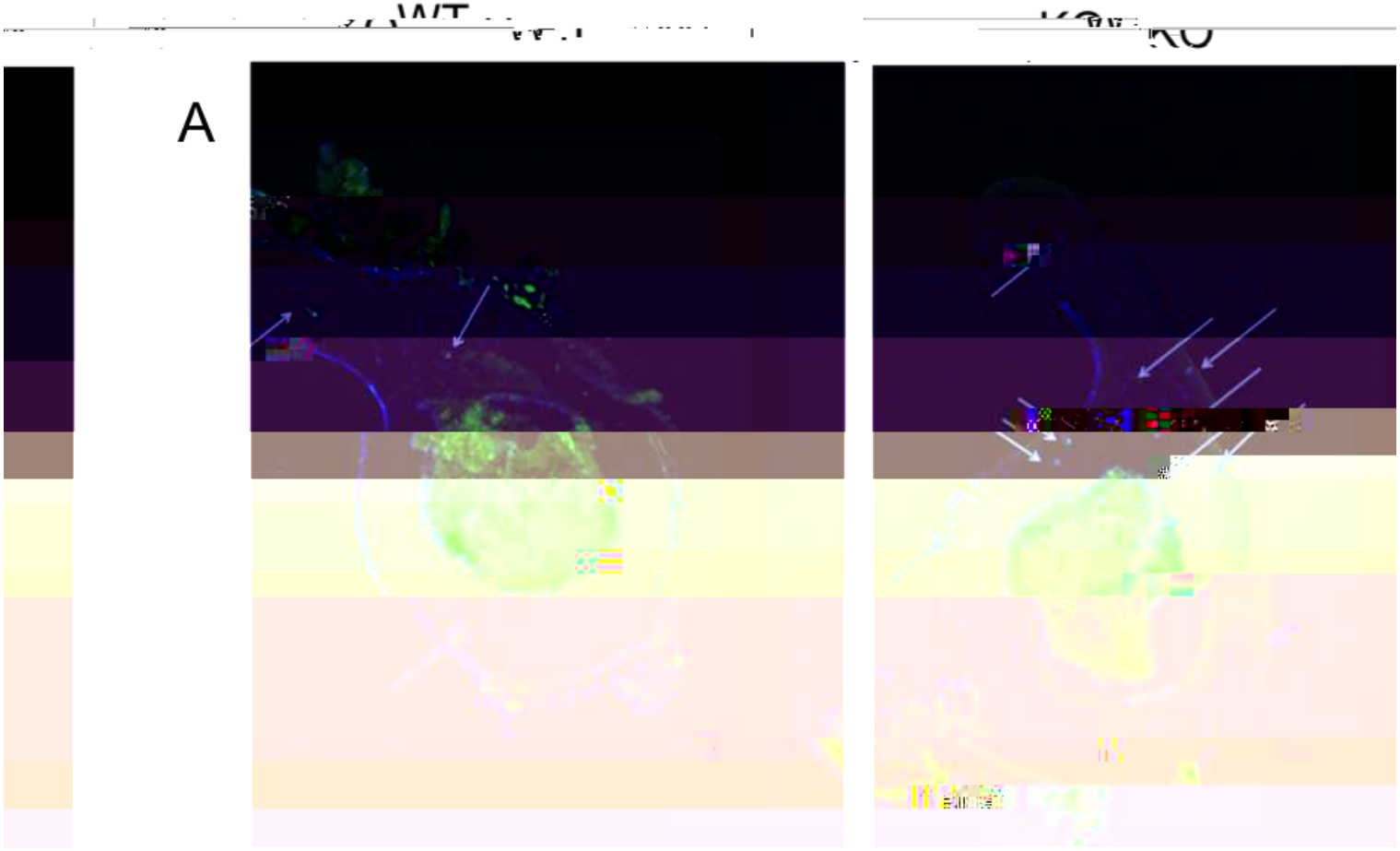
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Figure 2: Analysis of gene expression in calvaria using qRT-PCR. A) Decrease in CGRP expression in calvaria from OB-