Correction: A Novel Humanized GLP-1 Receptor Model Enables Both Affinity Purification and Cre-LoxP Deletion of the Receptor

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The expected band size in Fig 2D and the cartoon graphic in Fig 2F are incorrect. The authors have provided a corrected version of Fig 2 here.
Fig 2. Reverse transcription for PCR validation of hGLP-1R, mGlip-1r and Glp1r−/− lines. (A) A schematic of the gene that is expressed in the hGLP-1R mice. (B) The protein that is produced from this gene is a fusion of the mouse signal peptide (beige residues) and the human GLP-1R protein (white residues). The blue residues are those that differ between mouse and human GLP-1R. The signaling peptide is cleaved, leaving behind a human GLP-1R protein containing the C-terminal FLAG epitope (green residues). (C) cDNA was generated from total RNA isolated from islet and lung of hGLP-1R, mGlip-1r,
and Glp1r−/− mice for RT-PCR. The 5’ P915 primer annealed in human exon 8, while the 3’ P913 primer annealed to the FLAG region, a unique site within the hGLP-1R gene. This PCR product is a 588 bp fragment only observed in the hGLP-1R mice. (D) A schematic of the gene that is expressed in the Glp-1r−/− mice. (E) Once the splice event occurs between human exon 2 and mouse exon 2, a frame-shift mutation nullifies downstream protein expression. (F) The final protein product in Glp-1r−/− mice is a 98-aa truncation mutant. The first 36 aa’s of the mature protein encode a fraction of the GLP-1R extracellular domain, and the remaining 40 aa’s constitute missense sequence that shows no similarity to known proteins. The RT-PCR and DNA sequence analyses of the Glp-1r−/− gene product demonstrate the Glp-1r−/− mouse does not code for a functional GLP-1R. (G) A schematic of the wild-type (mGlp-1r) gene. (H) Using the same primer pair, PCR products from Glp-1r−/− (372 bp) and mGlp-1r (275 bp) mice differ in size by 97 bp. (I) The wild-type GLP-1R protein is 463 aa’s including the signaling peptide.

Reference

1. Jun LS, Showalter AD, Ali N, Dai F, Ma W, Coskun T, et al. (2014) A Novel Humanized GLP-1 Receptor Model Enables Both Affinity Purification and Cre-LoxP Deletion of the Receptor. PLoS ONE 9(4): e93746. doi:10.1371/journal.pone.0093746 PMID: 24695667