

Response to Reviewer 4 Comments:

Thank you for your detailed comments and suggestions. We found them to be useful as we approached our revision. Our responses to each of your points and suggestions are provided below.

Point 1: L.117 Fsh β refers to a gene in murine models? if not, the name of the gene should be capitalized. In both cases the correct way to write the genes is in italics. The same comment L.132

Response 1: Thank you for your detailed comments and suggestions. We have revised the way of writing the name of the *FSHB* gene in the entire manuscript. “*Fshb*” is used for mice or rats (e.g. Line 109 and Line 240); “*FSHB*” is used for domestic animals or humans (e.g. Line 271); “*FSHB*” is used for positions that do not clearly refer to the species (e.g. Line 80 and Line 131).

Point 2: L.L.248, 251, *FOXL2* gene. Gene symbols are italicized, review the complete document regarding this comment.

Response 2: Thank you for your detailed comments and suggestions. We have revised the way of writing the name of the *FOXL2* gene in the entire manuscript. All of them are italicized (e.g. Line 290 and Line 292). The writing of other genes appearing in the manuscript has also been proofread.