***Editorial comments:***

***1. 1.2.3: Please cite this url as a reference instead of putting it in the main text.***

*The url has been moved to the references, appearing now as reference 20 in the revised manuscript.*

***2. Figure 2 is a bit confusing-it looks like you’re starting with a chimeric sequence and finishing with the same one. Can you make this match the protocol a bit better?***

*Figure 2 has been modified as requested: the lower 3D structure representing the chimera is no longer the crystal structure of OSM, but rather an approximate representation of the 3D structure that the target chimera would adopt with a much shorter BC loop. To make this clear to the readers, we have added the remark "an approximate representation" in the legend of Figure 2.*

***3. Figure 3A: Please define the stars and dots here.***

*We have included the following text in the legend of Figure 3 to address this point: "Asterisks (\*) indicate fully conserved residues, colons (:) correspond to amino acids with strongly similar properties and periods (.) denote those with weakly similar features."*

***4. Your references have inverted parenthesis around volume numbers; can you address this?***

*Parentheses in the reference section have been corrected in the revised manuscript.*