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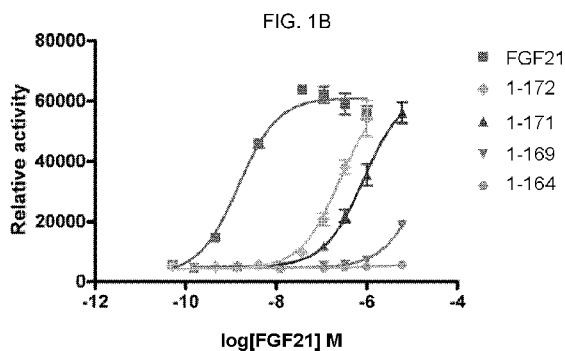
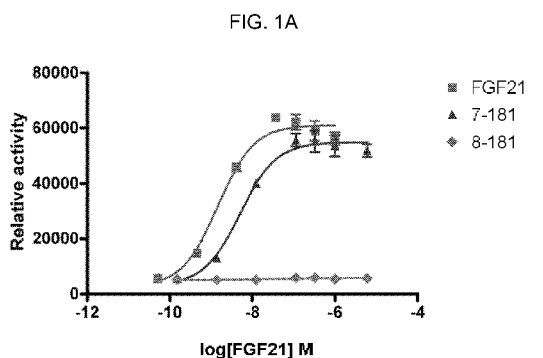
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[Continued on next page]

(54) Title: FGF21 MUTANTS AND USES THEREOF

(57) Abstract: The invention provides nucleic acid molecules encoding FGF21 mutant polypeptides, FGF21 mutant polypeptides, pharmaceutical compositions comprising FGF21 mutant polypeptides, and methods for treating metabolic disorders using such nucleic acids, polypeptides, or pharmaceutical compositions.



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## AMENDED CLAIMS

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51. (New) A polypeptide comprising the amino acid sequence of SEQ ID NO:4, further comprising the mutations L98R and P171G.

52. (New) A fusion polypeptide comprising the polypeptide of claim 51 linked to a heterologous sequence.

53. (New) The fusion polypeptide of claim 52, wherein the heterologous sequence is a Fc sequence.

54. (New) The fusion polypeptide of claim 53, wherein the Fc sequence comprises the amino acid sequence of SEQ ID NO:13.

55. (New) The fusion polypeptide of claim 54, wherein the polypeptide is joined to the heterologous sequence by a linker.

56. (New) The fusion polypeptide of claim 55 wherein the linker is GGGGGSGGGSGGGGS (SEQ ID NO:23).

57. (New) The fusion polypeptide of claim 55 wherein the linker is GGGGSGGGGSGGGGS (SEQ ID NO:31).

58. (New) The fusion polypeptide 56, wherein the fusion polypeptide is encoded by the nucleic acid sequence of SEQ ID NO:37.

59. (New) A multimer comprising two or more copies of the fusion polypeptide of claim 58.

60. (New) A pharmaceutical composition comprising the fusion polypeptide of claim 58 and a pharmaceutically acceptable formulation agent.