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* You should state whether an appropriate sample size was computed when the study was being designed
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* If no explicit power analysis was used, you should describe how you decided what sample (replicate) size (number) to use

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Not applicable to this study. This study did not involve experimental studies on animals. The experimental component of the study involved *in vitro* cell-based assays, which were performed with appropriate biological and technical replication (see below).

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* You should report how often each experiment was performed
* You should include a definition of biological versus technical replication
* The data obtained should be provided and sufficient information should be provided to indicate the number of independent biological and/or technical replicates
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* Criteria for exclusion/inclusion of data should be clearly stated
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The experimental component of this study involved the use of *in vitro* cell-based receptor assays. Each experiment was performed in triplicate (technical replication) at least three times (biological replication), as stated in the legends of the relevant figures – Figure 4 and associated supplementary figures/files.

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* Statistical analysis methods should be described and justified
* Raw data should be presented in figures whenever informative to do so (typically when N per group is less than 10)
* For each experiment, you should identify the statistical tests used, exact values of N, definitions of center, methods of multiple test correction, and dispersion and precision measures (e.g., mean, median, SD, SEM, confidence intervals; and, for the major substantive results, a measure of effect size (e.g., Pearson's r, Cohen's d)
* Report exact p-values wherever possible alongside the summary statistics and 95% confidence intervals. These should be reported for all key questions and not only when the p-value is less than 0.05.

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Statistical analysis was not applicable to this study. This study involved analysis of DNA/protein sequence data and identification of peptides that act as ligands for G-protein coupled receptors.

(For large datasets, or papers with a very large number of statistical tests, you may upload a single table file with tests, Ns, etc., with reference to sections in the manuscript.)

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This was not applicable to this study. This study involved analysis of DNA/protein sequence data and identification of peptides that act as ligands for G-protein coupled receptors.

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The source data files are provided for:

Figure 1 in: Figure 1 – figure supplement 1, Figure 1 - table supplement 1, Figure 1 -table supplement 2

Figure 2 and Figure 2 – figure supplement 1 in: Figure 2 – table supplement 1

Figure 3 in: Figure 3 - figure supplement 1, Figure 3 – table supplement 1

Figure 4 in: Figure 4 – table supplement 1 and <https://zenodo.org/record/3837351>

Figure 4 - figure supplement 1 in: Figure 4 – table supplement 2

Figure 4 - figure supplement 2 in: Figure 4 – table supplement 3

Figure 5 in: Figure 5 – source data 1

Figure 5 - figure supplement 2 in: Figure 5 – source data 1