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* You should state whether an appropriate sample size was computed when the study was being designed
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* High-throughput sequence data should be uploaded before submission, with a private link for reviewers provided (these are available from both GEO and ArrayExpress)

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Cell based functional assays were designed in the widely accepted format, 16 points concentration-responses, including one vehicle and 15 points of increasing concentrations of test compounds, usually between 30 pM to 30 uM, wide enough to cover all activity ranging from no activation to full activation of a target receptor. Each concentration-response was run in triplicate or quadruplicate (3 or 4 technical replicates for each concentration point) and each assay was repeated at least 3 times (biological replicates) to obtain pharmacological parameters (efficacy and potency).

In each assay, we also include a positive control. If positive control potency is consistent with previous ones (within 0.5 log unit), we count the biological replicate as a good one. If positive control potency is 0.5 log unit away from previous ones, we exclude the biological replicate and re-run the assay.

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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)
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* 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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* Indicate how samples were allocated into experimental groups (in the case of clinical studies, please specify allocation to treatment method); if randomization was used, please also state if restricted randomization was applied
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Please indicate the figures or tables for which source data files have been provided:

Additional source data are provided for Figures “Chemical Structure 1”

and “Chemical Structure 2” in form of the “Supplementary file 2”, which contains quality control data for all 62 compounds tested in the paper.