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Experimental in vitro, in vivo and in silico conditions, as well as setup are described in Materials and methods section. All the parameters used for in silico modelling experiments have also been described in Appendix section. Data analysis parameters can also be found in Materials and Methods section. CRIPSR/Cas9 screen sequencing data will be made available at: <https://www.ncbi.nlm.nih.gov/sra/SRP161445>.