

Extended Data Figure 3 | Ligand-binding pocket of NNC1702 and interactions between GCGR and NNC1702. a, Extracellular view of the binding pocket of NNC1702 N-terminal region within the GCGR TMD. The receptor and the peptide ligand are shown as cartoons, and coloured green (stalk), magenta (ECL1), cyan (ECL2), blue (TMD) and red (NNC1702). b, Binding site of NNC1702 C-terminal region in the stalk (blue), ECL1 (magenta) and ECD (orange) of GCGR. c-e, Schematic representation of interactions between GCGR and NNC1702 analysed

by LigPlot⁺ (ref. 43). **c**, Interactions between GCGR and the N-terminal region of NNC1702 (residues S2–Y10). **d**, Interactions between GCGR and the middle region of NNC1702 (residues S11–Q20). **e**, Interactions between GCGR and the C-terminal region of NNC1702 (residues D21–T29). The stick drawings of GCGR residues and NNC1702 are coloured grey and red, respectively. The labels of GCGR residues are coloured orange (ECD), green (stalk), blue (TMD), magenta (ECL1) and cyan (ECL2). The labels of NNC1702 residues are red.