



Fig. S11: Interactions between antagonist SHU9119 and MC4R. Potential hydrogen bonds and hydrophobic interactions of SHU9119 binding to MC4R (PDB ID: 6w25³) were analyzed using HBPLUS¹ with a maximum donor acceptor distance of 3.5 Å as implemented in the program LigPlot+ v.2.1², which was used to draw this schematic view. Potential hydrogen bonds are indicated by black dashed lines and distance labels. Residues with closest distances of less than 3.9 Å are deemed to be in van der Waals contact. These residues are shown as dashed, red segments of a circle. Water molecules (cyan color) and the calcium ion (green color) are depicted as spheres, respectively.