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Supplemental information

Specific motifs mediate post-synaptic and surface transport of G protein-coupled receptors

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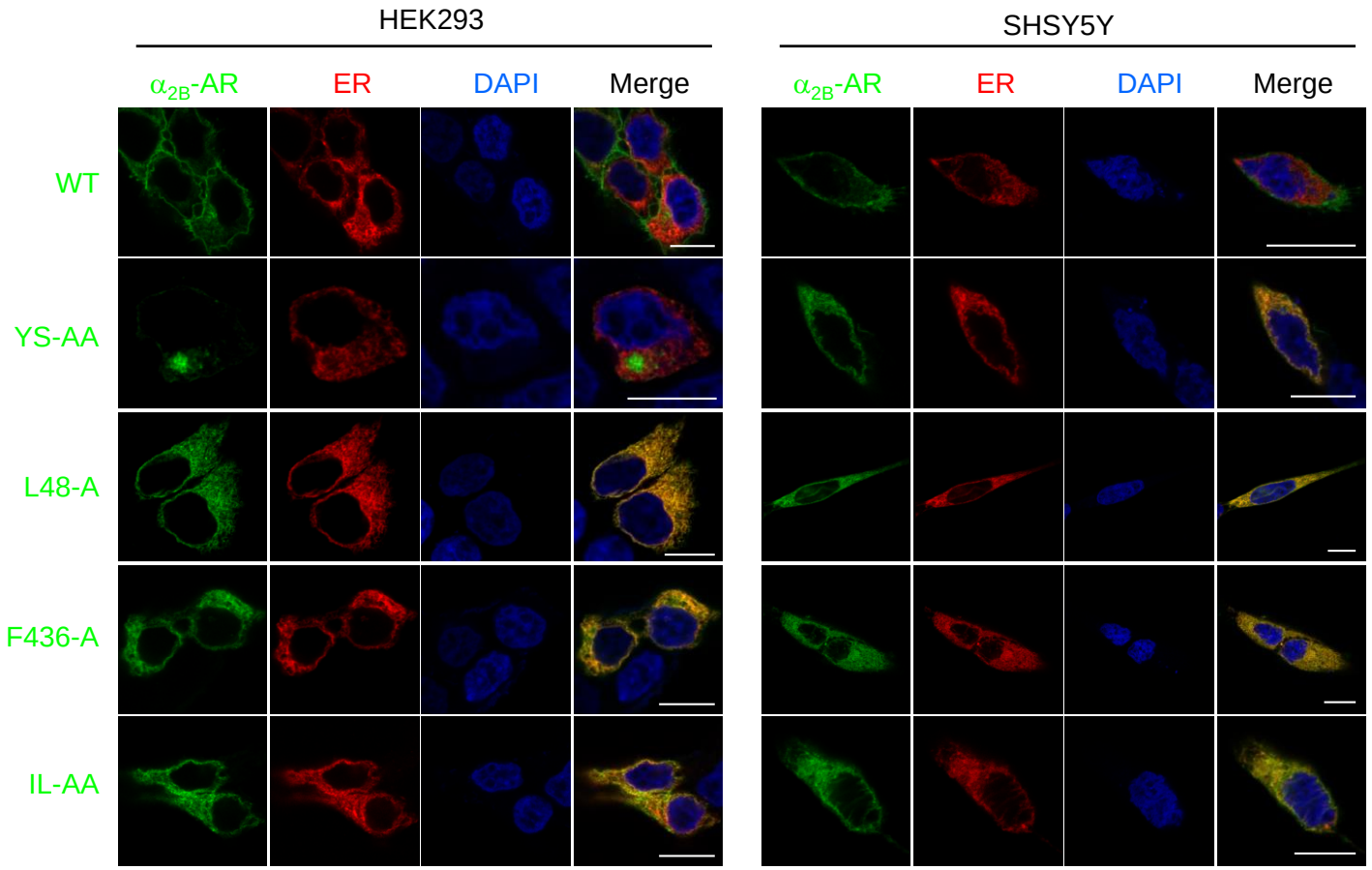

Figure S1. Colocalization of α_{2B}-AR and its mutants with the ER marker DsRed-ER in different cell types. Related to Figure 3. HEK293 and SHSY5Y cells were cultured and transfected with GFP-tagged α_{2B}-AR together with the DsRed-ER plasmids. Colocalization of α_{2B}-AR with DsRed-ER was revealed by confocal microscopy. The images shown are representatives of 2 experiments. Scale bars, 10 μm.

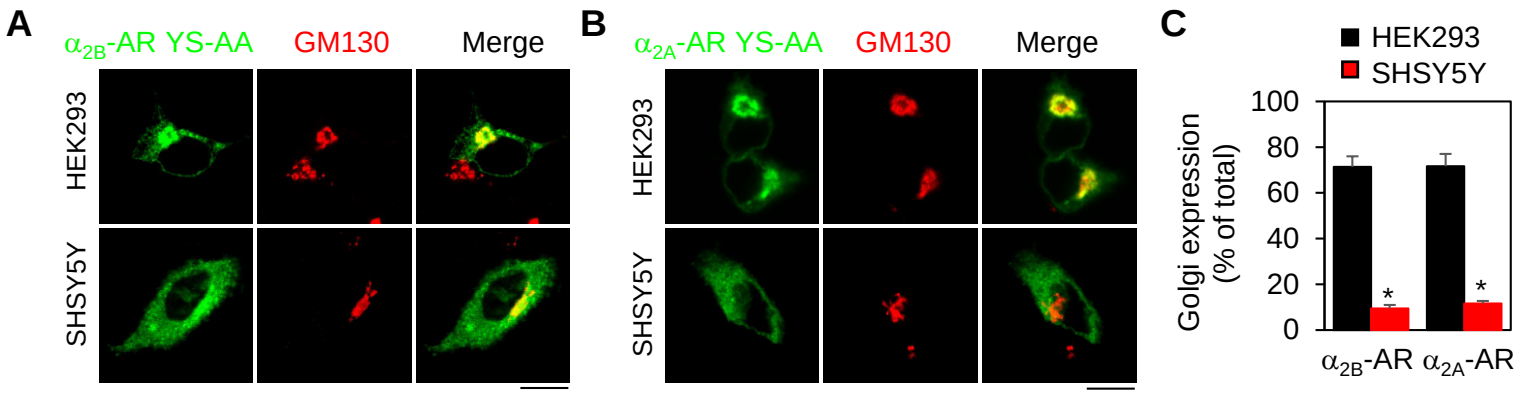

Figure S2. The subcellular distribution of YS-AA mutants of α_2-ARs in different cell types. Related to Figure 3.
(A) Colocalization of the YS-AA mutant of α_{2B}-AR with GM130 in HEK293 and SHSY5Y cells. Scale bar, 10 μm.
(B) Colocalization of the YS-AA mutant of α_{2A}-AR with GM130 in HEK293 and SHSY5Y cells. Scale bar, 10 μm.
(C) Quantitative data shown in (A) and (B). The data are expressed as percentages of total expression with a total of at least 20 cells quantified in each experiment. Bars represent mean ± SE (n = 3). Unpaired Student's t test; *p < 0.001 versus HEK293 cells.

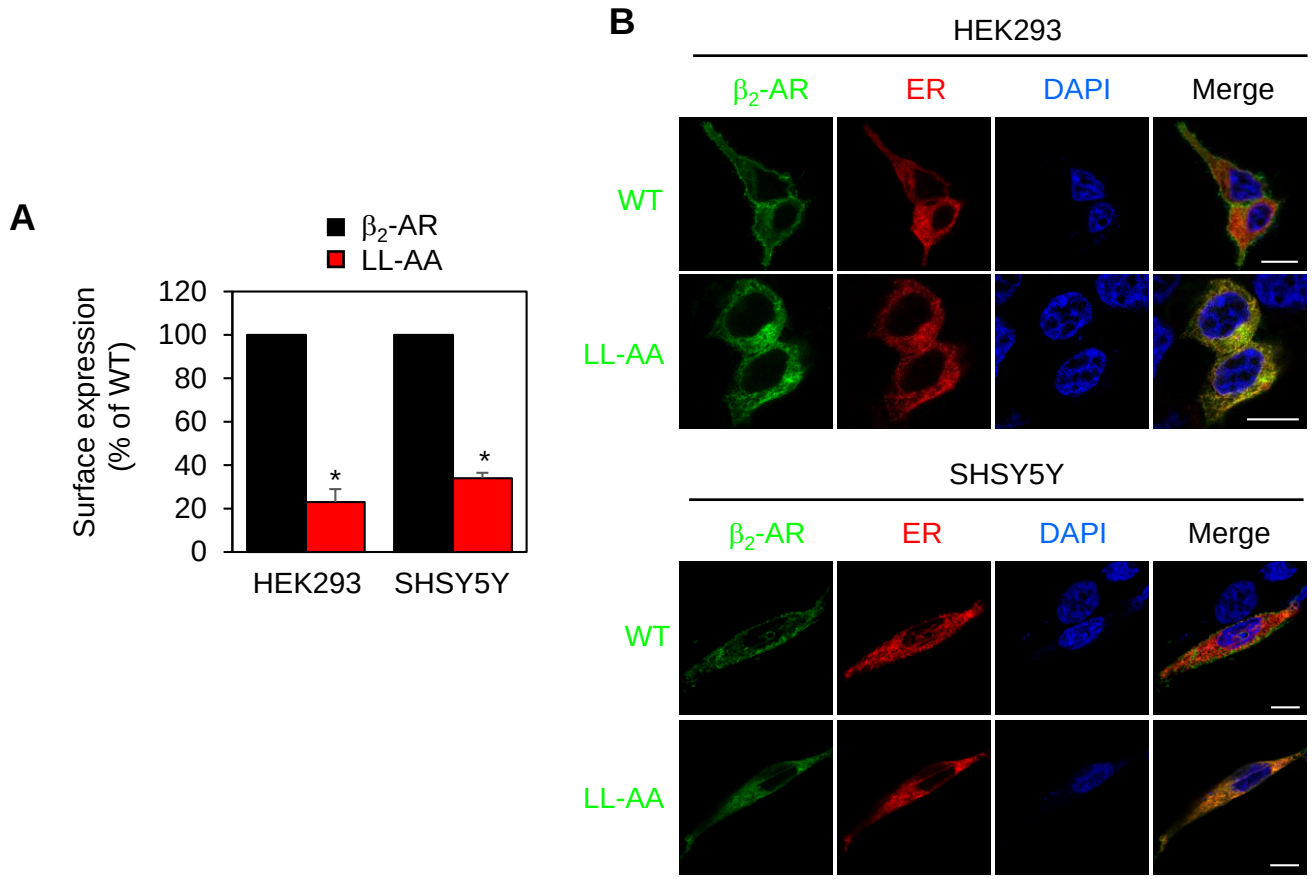

Figure S3. Trafficking function of the LL motif of β_2-AR in HEK293 and SHSY5Y cells. Related to Figure 3.
(A) Surface expression of β_2-AR or its LL-AA mutant measured by radioligand binding of intact live cells, The data are expressed as percentages of WT. Bars represent mean ± SE (n = 3-6). Unpaired Student's t test; *p < 0.001 versus WT.
(B) Colocalization of β_2-AR or its LL-AA with the ER marker DsRed-ER revealed by confocal microscopy. The images shown are representatives of 2 experiments. Scale bars, 10 μm.

Table S1. Primers used to clone mutants into the pEGFP-N1 vector by mutagenesis. Related to Figures 4-6.

Mutants	Sense (S) or antisense (A)	Sequences
VSVG DxE-AxA VSVGct DxE-AxA VSVGct DxE-AxA/LL-AA	S	AGAAAAGACAGATTTATACAGCCATAGCGATGAACCGACTTGGAAACAG
	A	CTGTTTCCAAGTCGGTTCATCGCTATGGCTGTATAAATCTGTCTTTTCT
VSVGct LL-AA	S	GAAATTTAAAAAGTACTTCCTCCAGGCCGCGAAATATATTCCCCGGGATCCAATG
	A	CATTGGATCCCGGGGAATATATTTCGCGGCCTGGAGGAAGTACTTTTTAAATTTC
β_2ARα2ct IL-AA	S	CCGTGCCTTTCGAAGGGCCGCTTGCCGGCCGTGGACC
	A	GGTCCACGGCCGGCAAGCGGCCCTTCGAAAGGCACGG
M3R LL-AA	S	CATTCAGAACCACTTTCAAGATGGCGGCGCTGTGCCAGTGTGACAAAAAAA
	A	TTTTTTTGTCACACTGGCACAGCGCCGCCATCTTGAAAGTGGTTCTGAATG