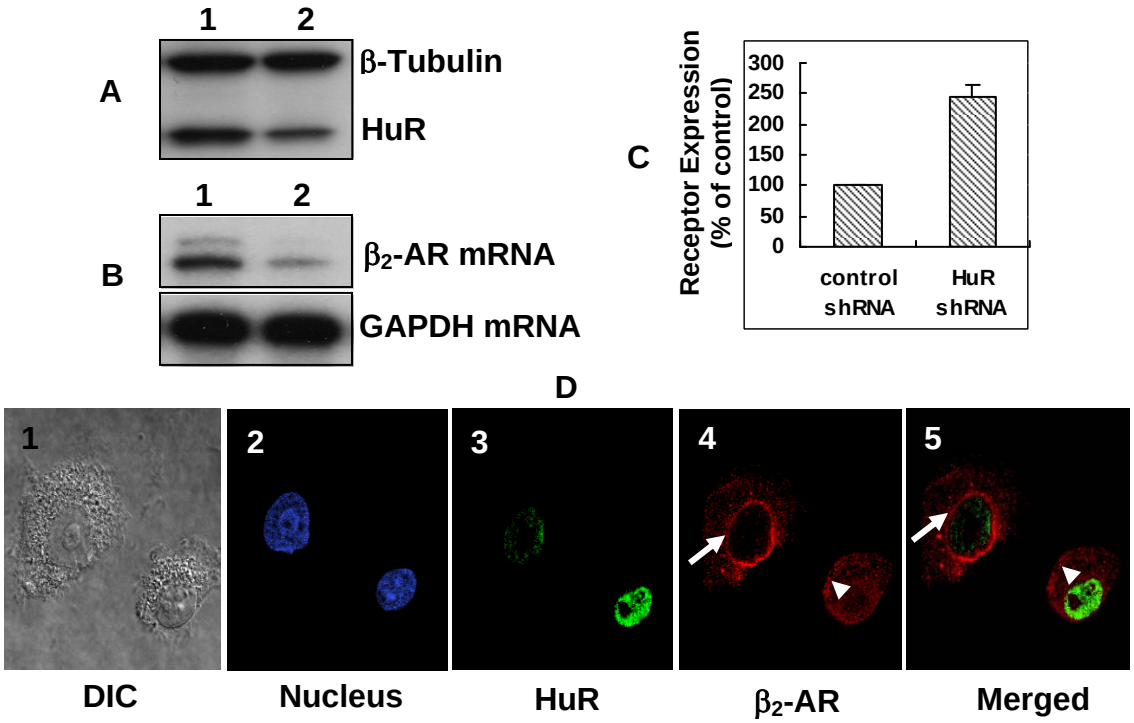
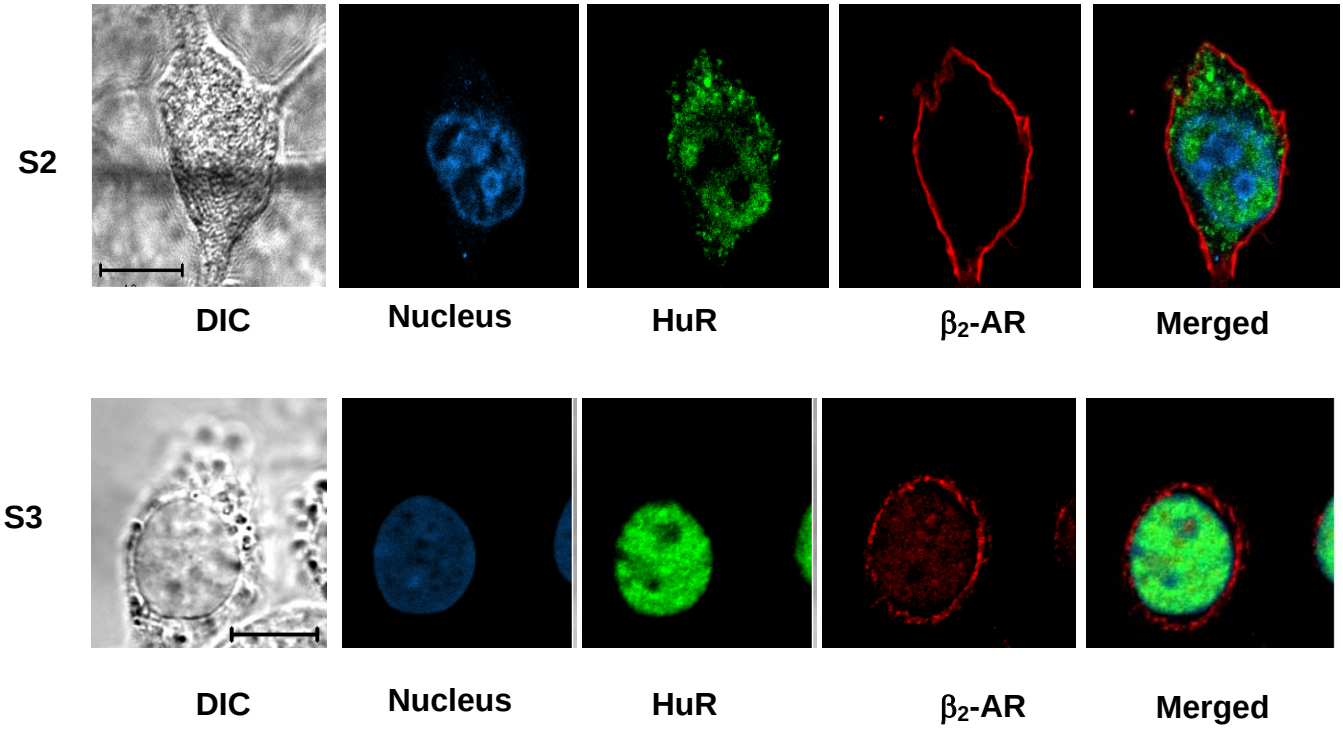
Figure S1. Effects of HuR Knockdown on β_2-AR expression in A431 cells.



A, Immunoblot analysis of cellular extracts from A431 cells expressing control shRNA (lane 1) and HuR specific shRNA (lane 2) using anti-HuR monoclonal antibody and β-tubulin (control) polyclonal antibody. **B,** RNase protection assay (RPA) for quantitative measurement of β_2-AR mRNA and GAPDH mRNAs in control (lane 1) and HuR knockdown A431 cells (lane 2). **C,** Radioligand binding assay using ^{125}I-CYP in control and HuR knockdown A431 cells. Ligand binding assays were performed as described in Figure 1C. **D,** Confocal microscopy images of A431 cells showing appearance of β_2-AR around the nucleus in HuR knockdown A431 cells.

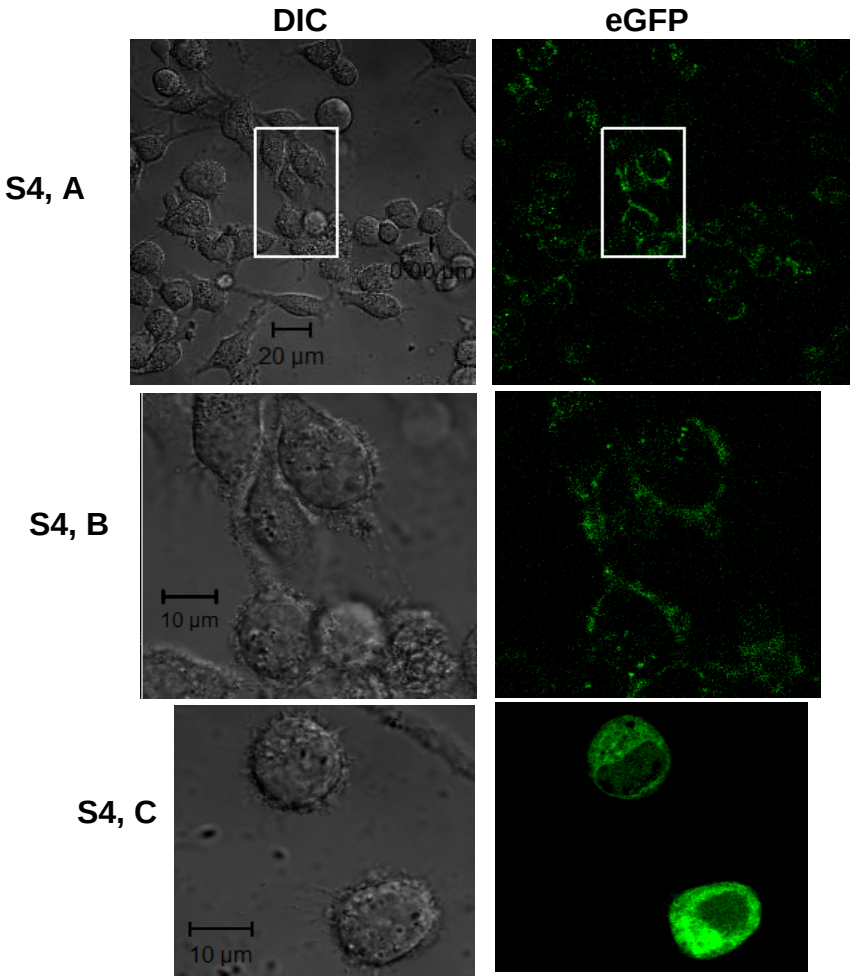
Figure S2 & S3. Role of 3'-UTR on β_2-AR localization.



S2, Immunofluorescence staining and confocal images of DDT_1-MF2 cell expressing full-length hamster β_2-AR cDNA shows over-expressed receptors are present on the plasma membrane. Magnified View of a single cell over-expressing β_2-AR. Scale bars 10 μm

S3, Immunofluorescence staining and confocal images of DDT_1-MF2 cell expressing 3'-UTR deletion constructs of hamster β_2-AR cDNA shows over-expressed receptors failed to traffic to plasma membrane and appeared around the nucleus. Magnified View of a single cell. Scale bars 10 μm

Figure S4 . Shows localization of enhanced GFP$^{NLS/myr}$ with and without β_2-AR 3'-UTR.



S4. DDT$_1$-MF2 cells were transfected with GFP$^{NLS/myr}$ with (S4 A & B) or without (S4, C) β_2-AR 3'-UTR. GFP localization was examined in live cells by Confocal microscopy. To avoid cumulative effect of GFP expression, we used a destabilized version of GFP fused to a myristoylation consensus sequence that limits protein diffusion to its site of synthesis (25). Receptor 3'-UTR sequences limited the distribution of GFP to the cell periphery as shown in figure S4 A&B. S4, B shows the magnified view of the inset in Fig. S4, A. In the absence of β_2-AR 3'-UTR, GFP was distributed around the nucleus (S4, C) and failed to traffic to the cell periphery. Scale bars as shown in the figure.