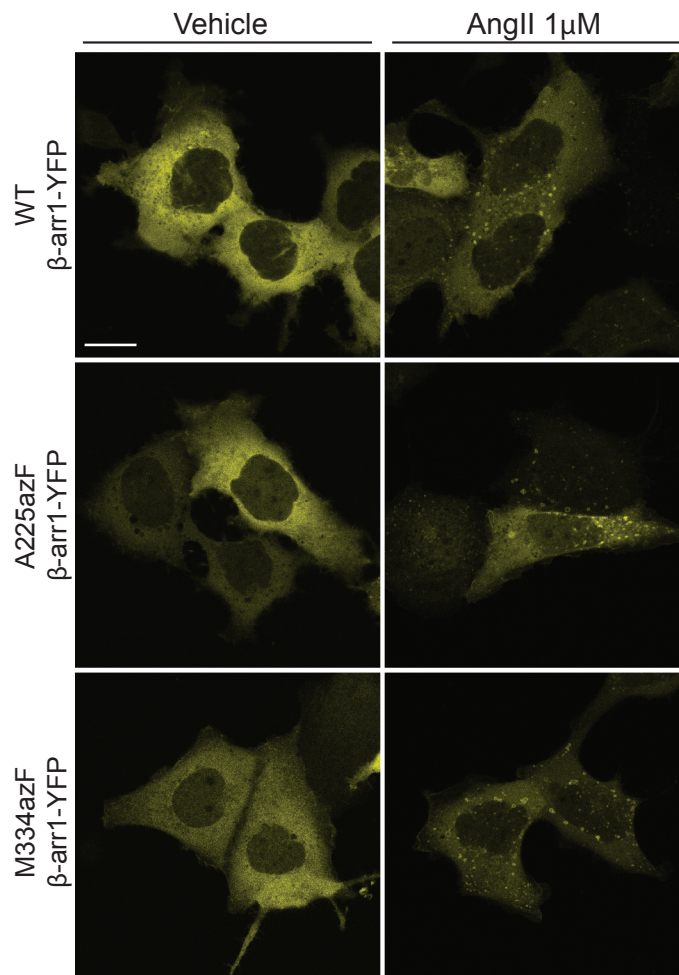
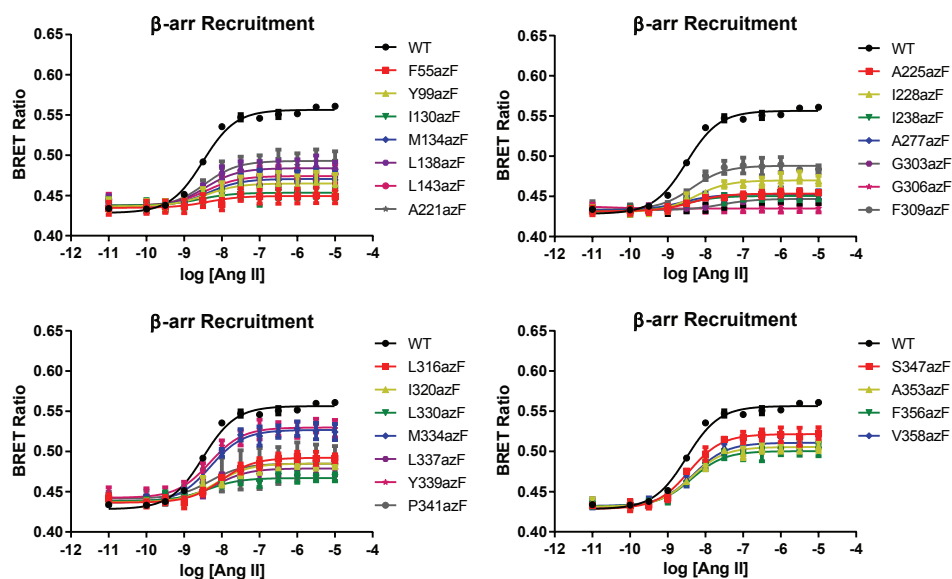


## Figure S1.



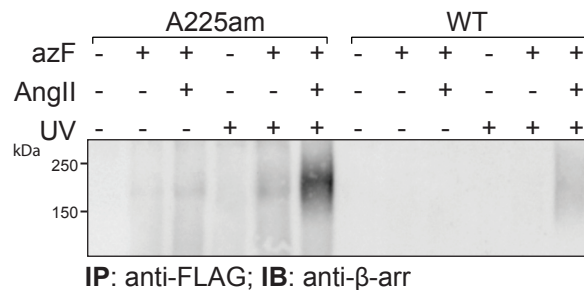
**Figure S1. Assessment of  $\beta$ -arrestin internalization with azF-incorporated mutants following AngII stimulation.** Confocal images of HEK293SL cells expressing  $\beta$ -arr1-YFP along with WT-AT1R or amber mutants, in the presence of 0.5 mM azF. Representative images before and after AngII stimulation of three independent experiments are shown. Scale bar, 20  $\mu$ m.

## Figure S2.



**Figure S2. BRET concentration-response curves for AngII-mediated  $\beta$ -arrestin recruitment to azF-AT1R mutants.** HEK293T cells transiently expressing RlucII-tagged receptor (WT-AT1R or amber mutants) along with  $\beta$ -arr1-YFP in the presence of 0.5 mM azF were stimulated with increasing concentrations of AngII. BRET measurements were recorded and expressed as BRET ratio. Data are means  $\pm$  SEM of three independent experiments.

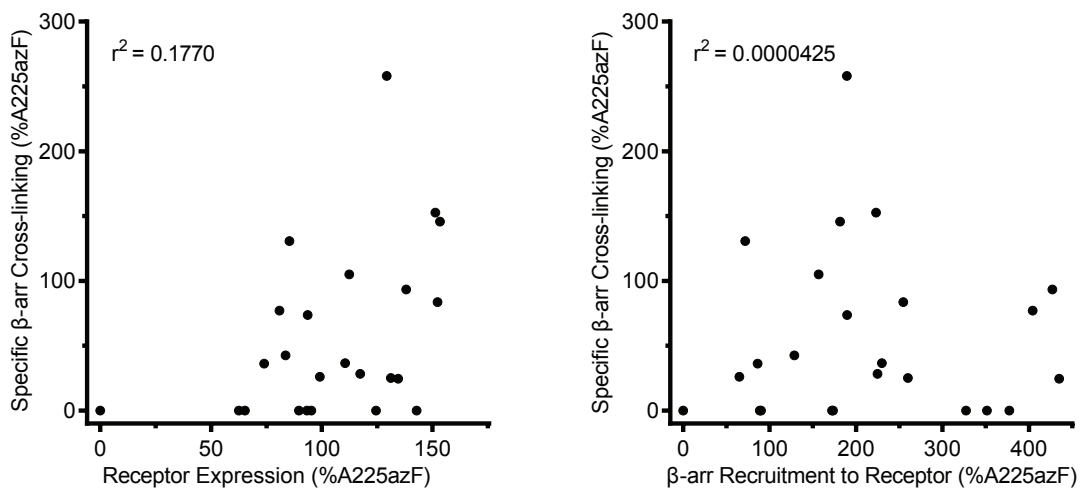
## Figure S3.



### Figure S3. Comparison of β-arrestin photocross-linking to WT-AT1R and A225amb-AT1R.

HEK293T cells transiently expressing WT-AT1R and mutant A225amb (internal control) in the absence (-) and presence (+) of 0.5 mM azF were incubated with vehicle (-) or 1 μM AngII (+), followed by exposure (+) or not (-) to UV light for 20 min at 4 °C. Total cell lysates were then immunoprecipitated (IP) using an anti-FLAG antibody to isolate AT1Rs, and products were resolved by SDS-PAGE. Cross-linked complexes were detected with an anti-β-arr1 antibody (immunoblot, IB). Shown are representative blots from two independent experiments.

## Figure S4.



**Figure S4. Correlation analyses between cross-linked AT1R-β-arrestin complexes vs. the expression of azF-incorporated mutant receptors, and their ability to bind β-arrestin.** Data from Fig. 2C were plotted as scatter plot graphs, and linear regression analysis was used to determine the correlation ( $r^2$ ).