Figure S1

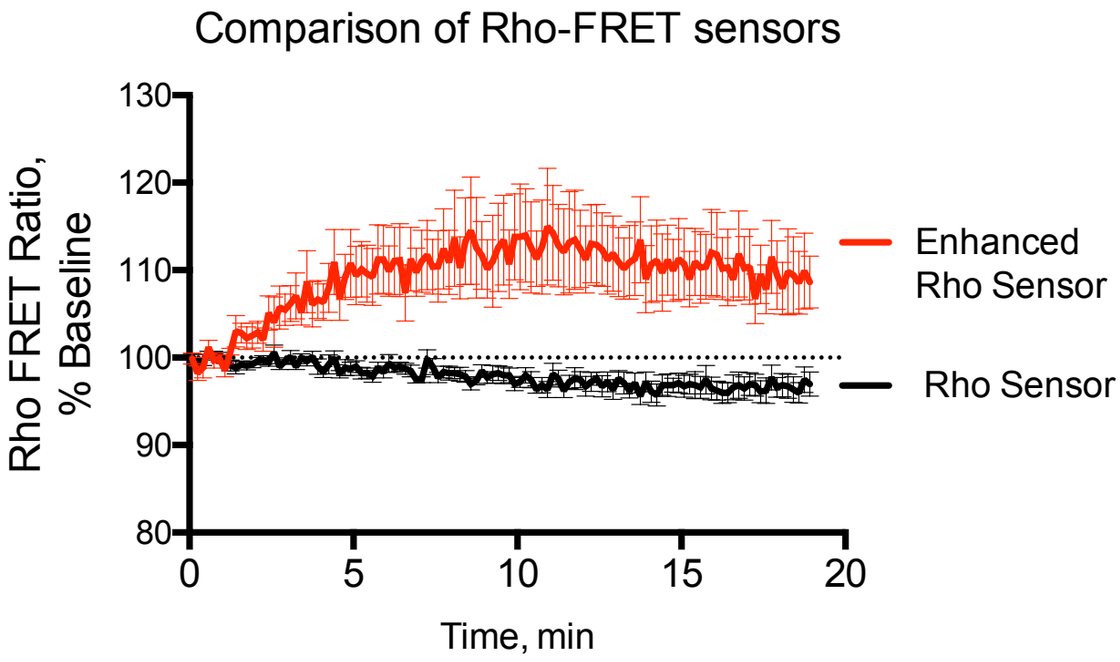

Comparison of Rho-FRET sensors
Rho FRET Ratio, % Baseline
130
120
110
100
90
80
0
5
10
15
20
Time, min
Enhanced Rho Sensor
Rho Sensor

Figure S2

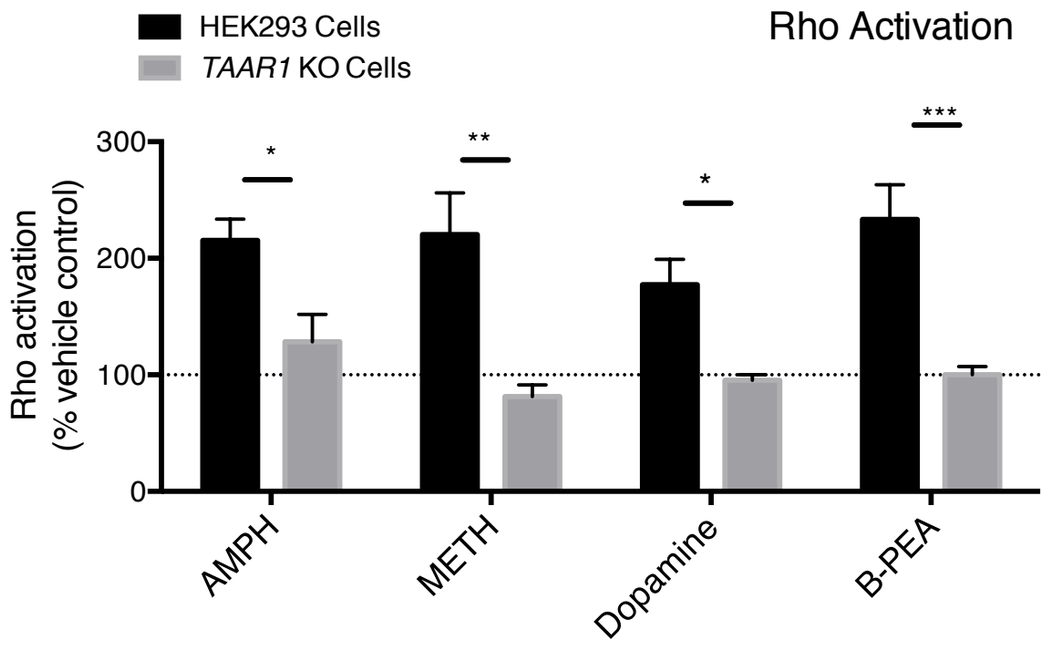

HEK293 Cells
TAAR1 KO Cells
Rho Activation
Rho activation
(% vehicle control)
300
200
100
0
*
**
*
***
AMPH
METH
Dopamine
B-PEA

Figure S3

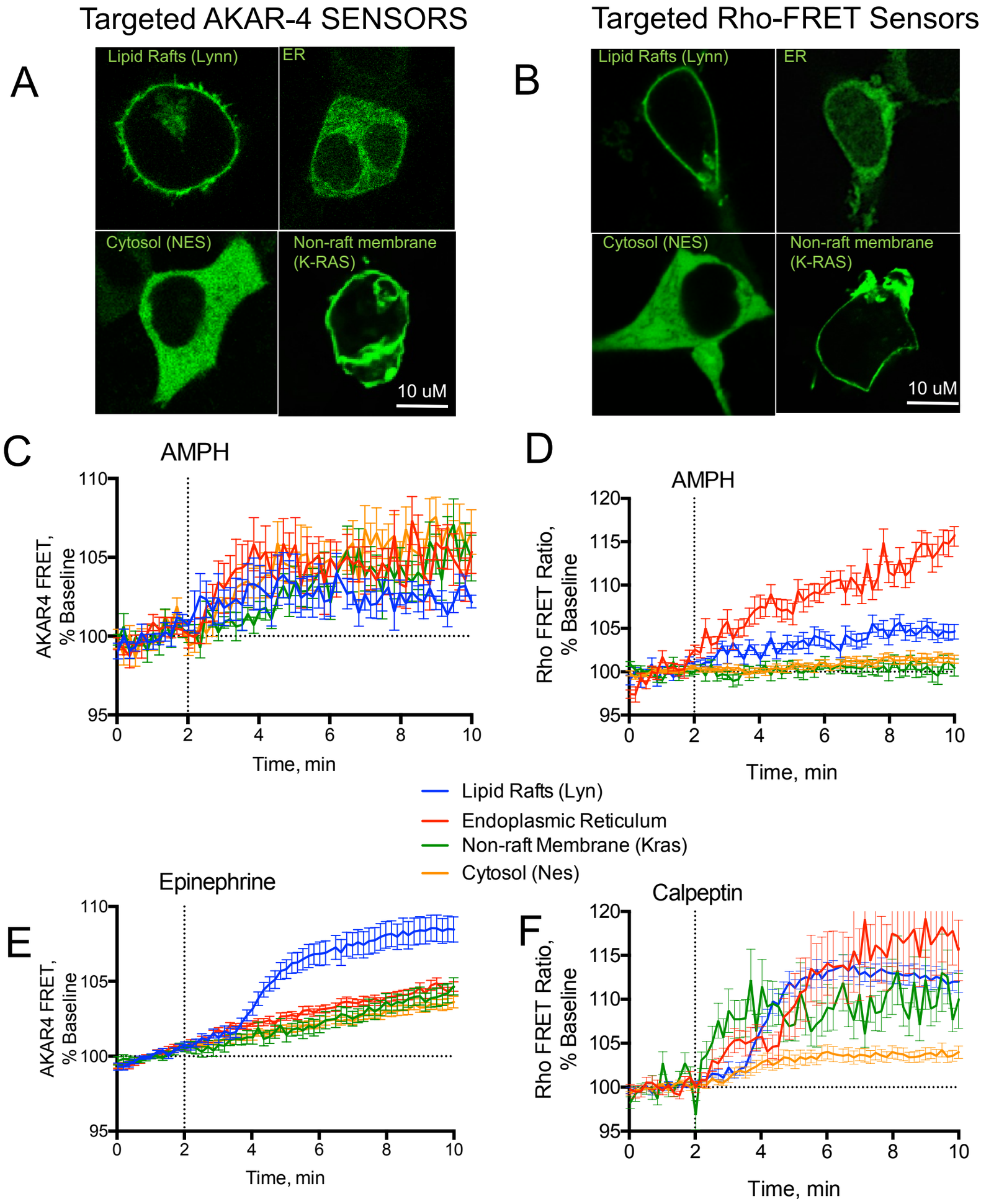
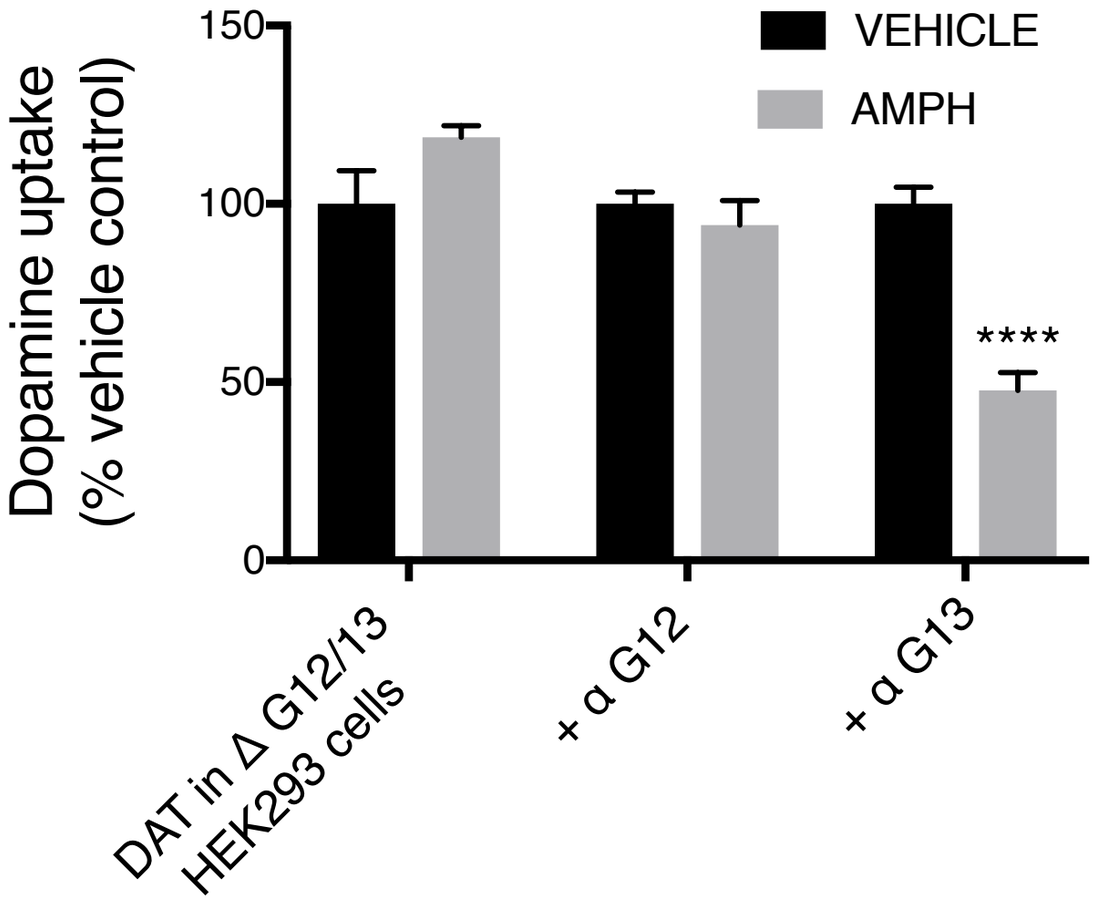

Targeted AKAR-4 SENSORS
Targeted Rho-FRET Sensors
A
B
Lipid Rafts (Lynn)
ER
Cytosol (NES)
Non-raft membrane (K-RAS)
10 uM
C
D
AMPH
AKAR4 FRET, % Baseline
Rho FRET Ratio, % Baseline
Time, min
Lipid Rafts (Lyn)
Endoplasmic Reticulum
Non-raft Membrane (Kras)
Cytosol (Nes)
E
F
Epinephrine
Calpeptin

Figure S4


Dopamine uptake
(% vehicle control)
150
100
50
0
VEHICLE
AMPH
****
DAT in Δ G12/13
HEK293 cells
+ α G12
+ α G13